

GenCore version 5.1.3
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OM nucleic - nucleic search, using sw model
Run on: October 9, 2002, 14:24:18 ; Search time 357 Seconds
(without alignments)
16332.329 Million cell updates/sec

Title: US-09-635-501-1
Perfect score: 3396
Sequence: 1 gaattcggttcacataa.....aaaaaaagggcgccgcg 3396

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1736436 seqs, 858457221 residues

Total number of hits satisfying chosen parameters: 3472872

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : N_Geneseq_032802.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3396	100.0	3396	22	Human angiotensin
2	3394.4	100.0	3396	22	CDNA encoding a hu
3	3309.8	97.5	3334	22	Human zace2 protei
4	2855.6	84.1	3732	22	Human CDNA sequenc
5	2416.4	71.2	2418	21	Human MPOT15 codi
6	2297.4	67.7	2920	22	Human CDNA encodin
7	2275	67.0	2911	22	Human CDNA encodin
8	2065.2	60.8	3474	22	Human CDNA encodin
9	1922.2	56.6	2262	21	Human MPOT15 codi

10	1888.6	55.6	2638	22	AAC84368	Mouse zace2-5 prot
11	1885.4	55.5	2638	22	AAC84370	Mouse zace2-10 pro
12	1782.4	52.5	2415	22	AAC84367	Human zace2 protei
13	1535.2	45.2	2415	22	AAC84369	Mouse zace2-5 prot
c 14	946	27.9	946	22	AAL06017	Human reproductive
c 15	946	27.9	946	22	AAL06018	Human reproductive
c 16	384	11.3	395	22	AAL01868	Rat angiotensin co
c 17	324	9.5	3942	20	AAX35851	Human angiotensin
18	323.2	9.5	4020	21	AAA38330	Human angiotensin
19	321.6	9.5	4024	11	AAQ04027	Human angiotensin
20	321.6	9.5	4024	11	AAX35850	Human angiotensin
21	320.4	9.4	3939	22	AAS06085	Angiotensin conver
22	320.4	9.4	4563	22	AAS06057	Angiotensin conver
23	318.4	9.4	4020	19	AAVA1320	Human angiotensin
24	296.6	8.7	5005	22	AAH57430	Human intestine ce
25	291	8.6	467	19	AAV09277	Nucleotide sequenc
26	285.8	8.4	2477	12	AAQ10328	Encodes human test
27	281.6	8.3	313	20	AAV86528	EST clone AU47. H
28	250.4	7.4	2082	21	AAA46692	Degenerate sequenc
29	250.4	7.4	2082	22	AAAS14169	Human zinc metallo
30	240.8	7.1	280	21	AAZ43074	Human 5' EST isola
c 31	217.8	6.4	456	22	ABA57571	Human foetal liver
c 32	217.8	6.4	456	22	AAK05620	Human brain expres
c 33	217.8	6.4	456	22	AAK31225	Human bone marrow
c 34	217.8	6.4	456	22	AAI37129	Probe #5815 used t
c 35	201.8	5.9	2089	23	ABL14379	Drosophila melanog
36	197.8	5.8	2074	16	AAQ82948	Tick carboxypeptid
37	186.4	5.5	2450	23	ABL16697	Drosophila melanog
38	186.4	5.5	5060	23	ABL16696	Drosophila melanog
c 39	177	5.2	177	22	ABA70193	Human foetal liver
c 40	177	5.2	177	22	AAK18416	Human brain expres
c 41	177	5.2	177	22	AAK44317	Human bone marrow
c 42	177	5.2	177	22	AAI50319	Probe #19005 used
43	127	3.7	847	20	AAX30083	Human secreted pro
44	127	3.7	848	20	AAZ40770	Secreted protein e
45	127	3.7	848	20	AAX88191	Human secreted pro

ALIGNMENTS

RESULT 1
AAD02758
ID AAD02758 standard; cDNA; 3396 BP.

XX AC AAD02758;

XX DT 31-MAY-2001 (first entry)

XX DE Human angiotensin converting enzyme-2 (ACE-2) cDNA.

XX KW Human; angiotensin converting enzyme-2; ACE-2; peptidyl dipeptidase A;
screening; therapy; hypertension; congestive heart failure; CHF;
inflammation; pain; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

XX CDS 82..2499

XX FT /*tag= a

XX FT /product= "Human angiotensin converting enzyme-2

XX FT (ACE-2)"

XX FT /EC_number= "3.4.15.1"

XX FT /note= "This region is referred as SEQ.ID.NO.3 and is

XX FT specifically claimed in claim 26"

XX FT 82..135

XX FT /*tag= b

XX FT 136..2496

XX FT /*tag= c

XX FT /product= "Human mature angiotensin converting enzyme-2

XX FT (ACE-2)"

XX PN US6194556-B1.

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XX 27-FEB-2001.
PD
XX 11-DEC-1997; 97US-0989299.
PF
XX 11-DEC-1997; 97US-0989299.
PR
XX (MILL-) MILLENNIUM PHARM INC.
PA
XX Acton SL, Robison KE;
PI
XX WPI: 2001-210604/21.
DR P-FSDB; RAY72667.
XX
PT Novel genes encoding angiotensin converting enzyme-2 useful as
PT antisense or antigene agents for therapeutics, diagnostics and
PT screening assays -
XX
XX Claim 1; Fig 1; 76pp; English.
PS
XX The present sequence is human angiotensin converting enzyme-2 (ACE-2)
XX cDNA. ACE is also referred as peptidyl dipeptidase A. Nucleic acid
XX sequence encoding ACE-2 is useful as antisense or antigene agents for
XX sequence specific modulation of gene expression or in the analysis of
XX single base-pair mutations in the gene. Nucleic acid sequence encoding
XX ACE-2 is useful in therapeutics, diagnostics and in screening assays.
XX ACE-2 antagonist is used to treat hypertension or congestive heart
XX failure (CHF). ACE agonist is used to reduce the inflammation and pain
XX resulting from an insect sting or bite, which was accompanied by an
XX injection of bradykinin. Anti-ACE-2 antibodies are used to monitor ACE-2
XX protein levels for determining the disease or condition associated with
XX an aberrant protein level.
XX
SQ Sequence 3396 BP; 1034 A; 659 C; 772 G; 931 T; 0 other;
Query Match 100.0%; Score 3396; DB 22; Length 3396;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3396; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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PN W0200018899-A2.
XX 06-APR-2000.
XX 29-SEP-1999; 99WO-US22976.
XX 30-SEP-1998; 98US-0163648.
XX (MILL-) MILLENNIUM PHARM INC.
XX Acton LS, Robison KE, Hsieh FY;
XX WPI; 2000-293140/25.
DR P-PSDB; AAY84562.
XX Isolated nucleic acid encoding angiotensin converting enzyme-2 (ACE-2)
PT polypeptide useful for detecting an ACE-2 therapeutic for treating
PT hypertension, congestive heart failure, myocardial infarction,
PT atherosclerosis and renal failure -
XX
XX
PS Claim 1; Fig 1; 138pp; English.
XX
CC The present sequence encodes a human angiotensin converting enzyme-2
CC (ACE-2). ACE-2 is expressed predominantly in kidneys and testis. The
CC sequence of the full length ACE-2 cDNA was determined from a clone
CC obtained from a cDNA library prepared from mRNA of a human heart of
CC a subject who had congestive heart failure. ACE-2 has significant
CC sequence homologies with ACE enzymes, and has also been shown to
CC hydrolyse angiotensin I into Ang (1-9). The ACE-2 therapeutics are
CC used to treat blood pressure related diseases and conditions, such as
CC hypertension, congestive heart failure, chronic heart failure, acute
CC heart failure, myocardial infarction, atherosclerosis and renal
CC failure.
XX
XX Sequence 3396 BP; 1034 A; 560 C; 771 G; 931 T; 0 other;
Query Match 100.0%; Score 3394.4; DB 21; Length 3396;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 3395; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
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1921	QY	GCACACCAAGCATTCAAGTGGAGTAAGCCTAAATCAGCTCTTGGAGATAAGCATAT	1980
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2341	DB	GTGGTTGGCATTGTCAATCTGATCTTCACTGGGATCAGAGATCGGAAGAAGAAAAATAA	2400
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2401	DB	GCAAGAGTGGAGAAATCTTATGCCCTCCATCGATATTAGCAAAGSAGAAAAATAATCCA	2460
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2461	DB	GGATTCCAAACACTTGATGATGTTTCCAGACCTCTCTTTAGAAAAATCTAGTCTTCTCT	2520
2521	QY	TGAGTGTATTTGTTGTATGTAAATGTTAAATTCATGGTATAGAAAAATAAAGATGATAA	2580
2521	DB	TGAGTGTATTTGTTGTATGTAAATGTTAAATTCATGGTATAGAAAAATAAAGATGATAA	2580
2581	QY	AGATATCATTAATGTCRAAACTATGACTCTGTTTCAGAAAAAAATTTGTCAAAGACAAC	2640
2581	DB	AGATATCATTAATGTCRAAACTATGACTCTGTTTCAGAAAAAAATTTGTCAAAGACAAC	2640
2641	QY	ATGGCCAAGGAGAGAGCATCTTCATTGACATTCCTTTTCAAGTATTTATTTCTGTCCTGGA	2700
2641	DB	ATGGCCAAGGAGAGAGCATCTTCATTGACATTCCTTTTCAAGTATTTATTTCTGTCCTGGA	2700

Qy	2701	TTTGACTCTCTGTTCTGTTCTTAAATAMAGGATTTTGTATTAGACTATATTAGGGAAGTGT	2716
Db	2701	TTTGACTCTCTGTTCTGTTCTTAAATAMAGGATTTTGTATTAGACTATATTAGGGAAGTGT	2760
Qy	2761	GTATTGTGTCACAGGCTGTTTCAGGGATTAATCTAAATGTAAATGTCGTGTGAATTTCTG	2820
Db	2761	GTATTGTGTCACAGGCTGTTTCAGGGATTAATCTAAATGTAAATGTCGTGTGAATTTCTG	2820
Qy	2821	AAGTTGAAAACAAGGATATCATTTGGAGCAAGTGTGGATCTTGTATGGAAATATGGGATG	2880
Db	2821	AAGTTGAAAACAAGGATATCATTTGGAGCAAGTGTGGATCTTGTATGGAAATATGGGATG	2880
Qy	2881	GATCACTTGTAAAGACAGTGCCTGGGAACGTGTTAGCTGCAAGGATGTGAGAATGGGATG	2940
Db	2881	GATCACTTGTAAAGACAGTGCCTGGGAACGTGTTAGCTGCAAGGATGTGAGAATGGGATG	2940
Qy	2941	CATTAGCTCAGTTTCATTTAATCCATGTTCAAGGATGACATGCTTCTTCACAGTAACTC	3000
Db	2941	CATTAGCTCAGTTTCATTTAATCCATGTTCAAGGATGACATGCTTCTTCACAGTAACTC	3000
Qy	3001	AGTTCAGTACTATGGTGTGATTTGCCCTACAGTGTGTTTGGAAATCGATCATGCTTTCTTCA	3060
Db	3001	AGTTCAGTACTATGGTGTGATTTGCCCTACAGTGTGTTTGGAAATCGATCATGCTTTCTTCA	3060
Qy	3061	AGGTGACAGGCTTAAAGAGAGAGAAGATCCAGGGAACAGGTAGAGGACATTTGCTTTTTCAC	3120
Db	3061	AGGTGACAGGCTTAAAGAGAGAGAAGATCCAGGGAACAGGTAGAGGACATTTGCTTTTTCAC	3120
Qy	3121	TTTCAAGGTGCTTGATCAACATCTCCCTGACAACTCATTTCTACTCTTCTAACTCTCCGT	3180
Db	3121	TTTCAAGGTGCTTGATCAACATCTCCCTGACAACTCATTTCTACTCTTCTAACTCTCCGT	3180
Qy	3181	GAACTCCAGAGAGCATGCCGTATAGAACTCATTTCTACTCTTCTAACTCTGGAGTGAA	3240
Db	3181	GAACTCCAGAGAGCATGCCGTATAGAACTCATTTCTACTCTTCTAACTCTGGAGTGAA	3240
Qy	3241	TGGAAATCCCAACTGATGTTTCAACCTCTCGAAGTGGGTACCCAGTCTCTTAAATCTTTTG	3300
Db	3241	TGGAAATCCCAACTGATGTTTCAACCTCTCGAAGTGGGTACCCAGTCTCTTAAATCTTTTG	3300
Qy	3301	TATTTGCTCACAGTGTGAGCAGTGTCTGAGCACAAGAGCAGACACTCAATAATGCTAGA	3360
Db	3301	TATTTGCTCACAGTGTGAGCAGTGTCTGAGCACAAGAGCAGACACTCAATAATGCTAGA	3360
Qy	3361	TTTACACACTCAAAAAAAGGGGGGGGGCGC	3396
Db	3361	TTTACACACTCAAAAAAAGGGGGGGGGCGC	3396
RESULT 3			
ID	AAC84366		
XX	AAC84366 standard; cdna; cdna; 3334 BP.		
AC	AAC84366;		
XX			
DT	19-MAR-2001 (first entry)		
XX			
DE	Human zace2 protein encoding cdna.		
XX			
KW	Zace2; metalloenzyme; angiotensin-converting enzyme; ACE; fertility;		
KW	zinc metalloproteinase; blood pressure; zinc protease; hypertension;		
KW	ventricular systolic dysfunction; renal impairment; heart failure;		
KW	scleroderma renal crisis; atherosclerosis; antiinflammatory; human;		
KW	antiarthritis; bradykinin inactivator; ss.		
XX			
OS	Homo sapiens.		
XX			
FH	Key	Location/Qualifiers	
FT	CDS	35..2452	
FT	/*tag= a		
FT	/product= "zace2"		
XX			

PN W0200070032-A1.
XX 23-NOV-2000.
PF 03-MAY-2000; 2000WO-US11932.
PR 13-MAY-1999; 99US-0311482.
PR 27-AUG-1999; 99US-0384706.
XX (ZYMO) ZYMOGENETICS INC.
XX Piddington CS, Petrie CR, Shoemaker KE, Bishop PD;
PI WPI; 2001-025018/03.
XX P-PSDB; AAB48095.
DR Angiotensin-converting enzyme, Zace2, useful for treating inflammatory
XX bowel disease, e.g. Crohn's disease and ulcerative colitis, or diseases
PT associated with inflammation such as arthritis and enterocolitis -
PT Example 1; Page 95-100; 125pp; English.
XX The invention relates to the metalloenzyme Zace2. Zace2, an angiotensin-
CC converting enzyme is a zinc metalloproteinase that plays roles in blood
CC pressure regulation and fertility. Zace2 can be expressed by standard
CC recombinant methodology. Zace2 polypeptides are useful for treating an
CC inflammatory bowel disease (e.g. Crohn's disease and ulcerative colitis),
CC diseases associated with inflammation like arthritis and enterocolitis,
CC as targets for identifying modulators of zinc protease activity, for
CC screening or identifying new angiotensin-converting enzyme (ACE)
CC inhibitors, and as a basis for rational drug design for inhibitory
CC molecules. The nucleic acids can be used to detect the expression of a
CC Zace2 gene in a biological sample, as probes for in vivo diagnosis and
CC for detecting and localizing Zace2 gene expression in tissue samples,
CC to determine whether a subject's chromosomes contain a mutation in the
CC Zace2 gene, and to detect aberrations associated with the Zace2 locus.
CC Inhibitors of ACE are used for treating hypertension of various
CC conditions, including left ventricular systolic dysfunction, progressive
CC renal impairment, scleroderma renal crisis, congestive heart failure due
CC to dysfunction, and treatment of atherosclerosis. Zace2 agonists may be
CC used to treat infertility while Zace2 antagonists are used for inducing
CC infertility. The present sequence represents a cDNA encoding the human
XX Zace2 protein.
XX Sequence 3334 BP; 1011 A; 640 C; 754 G; 929 T; 0 other;
Query Match 97.5%; Score 3309.8; DB 22; Length 3334;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 3314; Conservative 0; Mismatches 7; Indels 0; Gaps 0;
QY 51 CCGGGCAGGTACTTGGCTCACAGGGGACGATGTCAAGCTCTTCCTGCTCCTCTCAG 110
DB 4 CAGTGGATGTGATCTTGGCTCACAGGGGACGATGTCAAGCTCTTCCTGCTCCTCTCAG 63
QY 111 CTTTGTCTGCTTAAGTCTGCTCAGTCCACCAATGTAGGACAGCCAGCAATTTTGGGA 170
DB 64 CTTTGTCTGCTTAAGTCTGCTCAGTCCACCAATGTAGGACAGCCAGCAATTTTGGGA 123
QY 171 CAAGTTTAAACAGAGCCGAGACCTGTTCTATCAAGTTCACCTTCTTCTTGAATTA 230
DB 124 CAAGTTTAAACAGAGCCGAGACCTGTTCTATCAAGTTCACCTTCTTCTTGAATTA 183
QY 231 TAACCAATATTAAGTGAAGAAATGTCCAAACATGAATAATGCTGGGACAAATGGTC 290
DB 184 TAACCAATATTAAGTGAAGAAATGTCCAAACATGAATAATGCTGGGACAAATGGTC 243
QY 291 TGCCTTTTAAAGGAAACAGTCCACACTTGGCCCAATATATCCACTACAAGAAATTCAGAA 350
DB 244 TGCCTTTTAAAGGAAACAGTCCACACTTGGCCCAATATATCCACTACAAGAAATTCAGAA 303
QY 351 TCTCAGTCAAGCTTCAGCTGCAGCTCTTCAGCAAAATGGGCTTCAGTGTGTGACA 410
DB 304 TCTCAGTCAAGCTTCAGCTGCAGCTCTTCAGCAAAATGGGCTTCAGTGTGTGACA 363

QY 411 AGACAAGAGCAAAACGGTTGAACACAAATTTCTAATAATGAGCACCACCTTACAGTACTGG 470
DB 364 AGACAAGAGCAAAACGGTTGAACACAAATTTCTAATAATGAGCACCACCTTACAGTACTGG 423
QY 471 AAAAGTTTGTAAACCCAGATAATCCACAAAGATCTTATTAATGAACACAGCTTTGAATGA 530
DB 424 AAAAGTTTGTAAACCCAGATAATCCACAAAGATCTTATTAATGAACACAGCTTTGAATGA 483
QY 531 AATAATGCAAAACAGCTTTAGACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATC 590
DB 484 AATAATGCAAAACAGCTTTAGACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATC 543
QY 591 TGAGGTGCGCAAGCAGCTGAGGCCATTTATATGAAGAGTATGTGTCTTTGAAATAATGAGAT 650
DB 544 TGAGGTGCGCAAGCAGCTGAGGCCATTTATATGAAGAGTATGTGTCTTTGAAATAATGAGAT 603
QY 651 GGCAGAGCAAAATCAATATGAGGACTATGGGATATTTGGAGAGGAGACTATGAAGTAAA 710
DB 604 GGCAGAGCAAAATCAATATGAGGACTATGGGATATTTGGAGAGGAGACTATGAAGTAAA 663
QY 711 TGGGTAGATGCTATGACTACAGCCGCGCCAGTTGATTGAAGATGTGGAAACATACCTT 770
DB 664 TGGGTAGATGCTATGACTACAGCCGCGCCAGTTGATTGAAGATGTGGAAACATACCTT 723
QY 771 TGAAGAGATTAACCAATTTATGAACATCTTCATGCTATGTAGGGCAAAATTTGATGAA 830
DB 724 TGAAGAGATTAACCAATTTATGAACATCTTCATGCTATGTAGGGCAAAATTTGATGAA 783
QY 831 TGCCCTATCTCTCTATATCAGTCCAAATTTGGATGCTCCCTGCTCATTTGCTGGTGTAT 890
DB 784 TGCCCTATCTCTCTATATCAGTCCAAATTTGGATGCTCCCTGCTCATTTGCTGGTGTAT 843
QY 891 GTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCCTTTGGACAGAAACCAA 950
DB 844 GTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCCTTTGGACAGAAACCAA 903
QY 951 CATAGATGTTACTGATGATGCTGGACAGGCTGGATGTCACAGAGATTTTCAAGGA 1010
DB 904 CATAGATGTTACTGATGATGCTGGACAGGCTGGATGTCACAGAGATTTTCAAGGA 963
QY 1011 GCCCGAGAGATGCTTTGTATCTGTTGCTTCTTCTTAATATGACTCAAGGATTTCTGGGAAA 1070
DB 964 GCCCGAGAGATGCTTTGTATCTGTTGCTTCTTCTTAATATGACTCAAGGATTTCTGGGAAA 1023
QY 1071 TTCCATGCTAACCGACCCAGGAAATTTAGAAAGAGCTGTGCCATCCACAGCTTGGGA 1130
DB 1024 TTCCATGCTAACCGACCCAGGAAATTTAGAAAGAGCTGTGCCATCCACAGCTTGGGA 1083
QY 1131 CCTGGGAGGGGAGCTTCAGGATCCTTATGTCACAAAGGTGACAAATGACAGACTTCCT 1190
DB 1084 CCTGGGAGGGGAGCTTCAGGATCCTTATGTCACAAAGGTGACAAATGACAGACTTCCT 1143
QY 1191 GACAGCTCATCATGAGATGGGCATATCCAGTATGATATGGCATATGCTGTCACAACTTT 1250
DB 1144 GACAGCTCATCATGAGATGGGCATATCCAGTATGATATGGCATATGCTGTCACAACTTT 1203
QY 1251 TCTGCTTAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGGGAAATCATGTCACCT 1310
DB 1204 TCTGCTTAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGGGAAATCATGTCACCT 1263
QY 1311 TTTGTCAGCCACACCTAAGCAATTTAAATTCATTTGCTTCTGTCACCCGATTTTCAAGA 1370
DB 1264 TTTGTCAGCCACACCTAAGCAATTTAAATTCATTTGCTTCTGTCACCCGATTTTCAAGA 1323
QY 1371 AGCAATGAACAGAAATAAATCTCTCTCAAAACAGCAGCTCAGCATTTGTTGGGACTCT 1430
DB 1324 AGCAATGAACAGAAATAAATCTCTCTCAAAACAGCAGCTCAGCATTTGTTGGGACTCT 1383
QY 1431 GCCATTTACTTACATGTTAGAGAGAGTGGAGGTGGATGGTCTTTTAAAGGGGAAATTCCTCAA 1490
DB 1384 GCCATTTACTTACATGTTAGAGAGAGTGGAGGTGGATGGTCTTTTAAAGGGGAAATTCCTCAA 1443


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QY 1491 AGACCAGTGGATGAAAAAGTGGTGGGAGATGAAGCGAGAGATAGTGGGTGGTGAACC 1550
D 1492 |
D 1493 |
D 1494 AGACCAGTGGATGAAAAAGTGGTGGGAGATGAAGCGAGAGATAGTGGGTGGTGAACC 1503
QY 1551 TGTGCCCATGATGAACATATCTGTGACCCGCACTCTGTTCCTCATGTTTCTAATGATTA 1610
D 1552 |
D 1553 |
D 1554 TGTGCCCATGATGAACATATCTGTGACCCGCACTCTGTTCCTCATGTTTCTAATGATTA 1663
QY 1611 CTCATTCATTCGATATACACAGGACCCCTTACCAATTCAGTTTCAAGAGCACTTTG 1670
D 1612 |
D 1613 |
D 1614 CTCATTCATTCGATATACACAGGACCCCTTACCAATTCAGTTTCAAGAGCACTTTG 1623
QY 1671 TCAAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAAAGC 1730
D 1672 |
D 1673 |
D 1674 TCAAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAAAGC 1683
QY 1731 TGGACAGAACTGTTCAATATGCTGAGGCTTGGAAATTCAGAACCTCGACCTAGCAATT 1790
D 1732 |
D 1733 |
D 1734 TGGACAGAACTGTTCAATATGCTGAGGCTTGGAAATTCAGAACCTCGACCTAGCAATT 1743
QY 1791 GGAATATCTGTAGGAGCAAGCAATCAATGTAAGGCCACTGCTCAACTACTTTGAGCC 1850
D 1792 |
D 1793 |
D 1794 GGAATATCTGTAGGAGCAAGCAATCAATGTAAGGCCACTGCTCAACTACTTTGAGCC 1803
QY 1851 CTTATTTACCTGGCTGAAGACCCAGAACAAATTTCTTTTGGGATGGAGTACCGACTG 1910
D 1852 |
D 1853 |
D 1854 CTTATTTACCTGGCTGAAGACCCAGAACAAATTTCTTTTGGGATGGAGTACCGACTG 1863
QY 1911 GAGTCCATATGACAGACAAAGCATCAAGTGGAGATAGCCCTAAATCAGCTCTTGGAGA 1970
D 1912 |
D 1913 |
D 1914 GAGTCCATATGACAGACAAAGCATCAAGTGGAGATAGCCCTAAATCAGCTCTTGGAGA 1923
QY 1971 TAAACCATATGAATGGAACGACAAATGAAATGTAACCTGTTCCGATCATCTGTTGCATATGC 2030
D 1972 |
D 1973 |
D 1974 TAAACCATATGAATGGAACGACAAATGAAATGTAACCTGTTCCGATCATCTGTTGCATATGC 1983
QY 2031 TATGAGGAGTACTTTTAAAGTAAATCAGATGATCTTTTGGGAGGAGGATGT 2090
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D 2033 |
D 2034 TATGAGGAGTACTTTTAAAGTAAATCAGATGATCTTTTGGGAGGAGGATGT 2043
QY 2091 GGGAGTGGCTAATTTGAACCAAGATCTCCCTTTAATTTCTTGTGCTACCTGCACCTTAAAAA 2150
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QY 2151 TGTGCTCATATCAATCTCTAGAACCTGAAGTTGAAAGGCCATCAGGATGTCGCCGAGCGG 2210
D 2152 |
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QY 2211 TATCAATGATGTTCCGCTCTGAATGACACAGCCCTAGAGTTCTGGGGATACAGCCAAC 2270
D 2212 |
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D 2214 TATCAATGATGTTCCGCTCTGAATGACACAGCCCTAGAGTTCTGGGGATACAGCCAAC 2223
QY 2271 ACTTGGACCTCTAACCGACCCCTGTTTCCATATGGCTGATGTTTGGAGTGTGAT 2330
D 2272 |
D 2273 |
D 2274 ACTTGGACCTCTAACCGACCCCTGTTTCCATATGGCTGATGTTTGGAGTGTGAT 2283
QY 2331 GGGAGTGTAGTGGTGGCATTTGCATCTGATCTTCACTGGGATCAGAGATCGGAAGAA 2390
D 2332 |
D 2333 |
D 2334 GGGAGTGTAGTGGTGGCATTTGCATCTGATCTTCACTGGGATCAGAGATCGGAAGAA 2343
QY 2391 GAAAAATAAGCAAGAGTGGAGAAAACTTATGCTCCATCGATATTTAGCAAGGAGA 2450
D 2392 |
D 2393 |
D 2394 GAAAAATAAGCAAGAGTGGAGAAAACTTATGCTCCATCGATATTTAGCAAGGAGA 2403
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D 2452 |
D 2453 |
D 2454 AAATATCAGGATTCACAAACACTGATGATGTTTCAAGCTCTCTTTAGAAAAATCTATG 2463
QY 2511 TTTTCCCTCTGAGGTGATTTTGTGTATGTAATGTTAATTTCAATGTTATGAGAAATAT 2570
D 2512 |
D 2513 |
D 2514 TTTTCCCTCTGAGGTGATTTTGTGTATGTAATGTTAATTTCAATGTTATGAGAAATAT 2523
QY 2571 AAGATGATAAGATATCATTAATGTCAAAACTATGACTCTGTTTCAGAAAAAAATTTGTC 2630
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DB 2524 AAGATGATAAGATATCATTAATGCTCAAACTATGACTCTCTTCAGAAAAAAATTTGTC 2583
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D 2632 |
D 2633 |
D 2634 CAAGACAAATGCGCAAGGAGAGAGCAATCTTCAATTCAGATTCCTTTCAGTATTTATTTTC 2643
QY 2691 TGTCTCTCGATTTGACTCTCTGTTCTTCTTAAAGGATTTTGTATTAGAGTATATTA 2750
D 2692 |
D 2693 |
D 2694 TGTCTCTCGATTTGACTCTCTGTTCTTCTTAAAGGATTTTGTATTAGAGTATATTA 2703
QY 2751 GGGAAAGTGTGATTTGGTCTCACAGGCTTGTTCAGGGATTAATCTAAATGTAATGTCGT 2810
D 2752 |
D 2753 |
D 2754 GGGAAAGTGTGATTTGGTCTCACAGGCTTGTTCAGGGATTAATCTAAATGTAATGTCGT 2763
QY 2811 TGAATTTCTGAAGTTGAAGAACCAAGGATATATCATTTGGAGCAAGTGTGATCTGTATGG 2870
D 2812 |
D 2813 |
D 2814 TGAATTTCTGAAGTTGAAGAACCAAGGATATATCATTTGGAGCAAGTGTGATCTGTATGG 2823
QY 2871 AATATGGATGGATCACTTGTAAAGGACAGTGCCTGGGAACCTGCTAGCTGCAAGGATTCGA 2930
D 2872 |
D 2873 |
D 2874 AATATGGATGGATCACTTGTAAAGGACAGTGCCTGGGAACCTGCTAGCTGCAAGGATTCGA 2883
QY 2931 GAATGCGATGCAATAGTCACTTCAATTTAATCCATTTGCAAGGATGACATGCTTTCTTC 2990
D 2932 |
D 2933 |
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QY 2991 ACAGTAACCTCACTTCAAGTACATGCTGATTTGCCCTACAGTGTGTTGAAATCGATCAT 3050
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D 3053 |
D 3054 GCTTTCTTCAAGGTCAGAGTCTAAAGAGAGAGAAATCCAGGGAACAGGTAGAGGACATT 3063
QY 3111 GCTTTTCACTTCCAAAGTGTGATCAACATCTCCCTGACACACAAACTAGAGCCAG 3170
D 3112 |
D 3113 |
D 3114 GCTTTTCACTTCCAAAGTGTGATCAACATCTCCCTGACACACAAACTAGAGCCAG 3123
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D 3172 |
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QY 3231 GTGGAGTGAATGGAATCCAACTGATGTTTCACTCTGACCTCTGAAAGTGGGTACCCAGTCTCT 3290
D 3232 |
D 3233 |
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QY 3291 AAATCTTTTGTATTGCTTCACAGTGTTCAGGAGTCTGTCAGCACAAGCAGACACCAAT 3350
D 3292 |
D 3293 |
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QY 3351 AAATGCTAGATTTACACACTC 3371
D 3352 |
D 3353 |
D 3354 AAATGCTAGATTTACACACTC 3324
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RESULT 4

AAS21279

ID AAS21279 standard; cdna; 3732 bp.

XX AAS21279;

XX AAS21279;

XX 24-OCT-2001 (first entry)

XX Human cDNA sequence encoding for PRO1885 polypeptide.

DE Human secretory and transmembrane; PRO; mammalian; cancer; lung;

KW breast; prostate; cervical; tumour necrosis factor alpha; TNF-alpha;

KW cartilage; ear; proliferation; glucose; free fatty acid; skeletal muscle;

KW adipocyte; A-peptide; factor VIIA; gene therapy; ss.

XX Homo sapiens.

OS

XX

PN	WO200140466-A2.	Query Match	84.1%;	Score	2855.6;	DB	22;	Length	3732;
XX		Best Local Similarity	88.8%;	Pred. No. 0;					
PD	07-JUN-2001.	Matches	3308;	Conservative	0;	Mismatches	9;	Indels	407;
XX		Gaps							4;
PF	01-DEC-2000;	2000WO-US32678.							
XX									
XX	01-DEC-1999;	99WO-US28301.							
PR	01-DEC-1999;	99WO-US28634.							
PR	02-DEC-1999;	99WO-US28551.							
PR	02-DEC-1999;	99WO-US28564.							
PR	02-DEC-1999;	99WO-US28565.							
PR	09-DEC-1999;	99US-0170262.							
PR	16-DEC-1999;	99WO-US30095.							
PR	20-DEC-1999;	99WO-US30911.							
PR	20-DEC-1999;	99WO-US30999.							
PR	30-DEC-1999;	99WO-US31243.							
PR	06-JAN-2000;	2000WO-US00277.							
PR	06-JAN-2000;	2000WO-US00276.							
PR	11-FEB-2000;	2000WO-US03565.							
PR	18-FEB-2000;	2000WO-US04341.							
PR	18-FEB-2000;	2000WO-US04342.							
PR	24-FEB-2000;	2000WO-US04914.							
PR	24-FEB-2000;	2000WO-US05004.							
PR	01-MAR-2000;	2000WO-US05601.							
PR	20-MAR-2000;	2000WO-US07377.							
PR	21-MAR-2000;	2000WO-US07532.							
PR	30-MAR-2000;	2000WO-US08439.							
PR	17-MAY-2000;	2000WO-US13705.							
PR	22-MAY-2000;	2000WO-US14042.							
PR	30-MAY-2000;	2000WO-US14941.							
PR	02-JUN-2000;	2000WO-US15264.							
PR	10-NOV-2000;	2000WO-US30873.							
XX									
PA	(GETH) GENENTECH INC.								
XX									
PI	Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;								
PI	Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;								
PI	Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;								
XX									
WPI:	2001-408281/43.								
DR	P-PSDB; AAU12207.								
XX									
PT	Isolated, secretory and transmembrane PRO polypeptide used to detect								
PT	other PRO polypeptides, link bioactive molecules to cells expressing								
PT	PRO polypeptides, and detect the presence of mammalian tumours e.g.								
PT	lung, breast, prostate, cervical								
XX									
PS	Claim 3; Fig 71; 813pp; English.								
XX									
CC	AA521244-AA521518 encode for novel human secretory and transmembrane								
CC	PRO polypeptides. The PRO polypeptides are useful to detect other								
CC	PRO polypeptides, to link bioactive molecules to cells expressing								
CC	PRO polypeptides, to modulate biological activities of cells expressing								
CC	PRO polypeptides, and to detect the presence of mammalian lung, colon,								
CC	breast, prostate, rectal, cervical or liver tumours by comparing PRO								
CC	polypeptide expression in a cell sample to that in a control sample.								
CC	Some of the 275 sequences are also useful to stimulate the release of								
CC	tumour necrosis factor-alpha (TNF-alpha) from human blood, the								
CC	proliferation or differentiation of chondrocytes, the proliferation or								
CC	gene expression in pericyte cells, the release of proteoglycans from								
CC	cartilage, the proliferation of inner ear utricular supporting cells or								
CC	of T-lymphocytes, the release of a cytokine from peripheral blood								
CC	monocytes (PMNCs), or the proliferation of endothelial cells. Some of								
CC	the PRO polypeptides may modulate glucose or free fatty acid uptake by								
CC	skeletal muscle cells or by adipocytes; or inhibit binding of A-peptide								
CC	to factor V1A. The PRO polypeptides can be used in assays to identify								
CC	molecules involved in binding interactions. The polynucleotides encoding								
CC	PRO polypeptides can be used to generate probes, antisense RNA/DNA,								
CC	transgenic or knock out animals and can be used in gene therapy.								
XX									
SQ	Sequence 3732 BP; 1137 A; 722 C; 821 G; 1052 T; 0 other;								

[illegible]

QY 2886 CTGTGAAGACACTGCTGGAACTGCTAGCTGCAAGGATTGAGAAATGGCATGCATTA 2945
DB 3248 CTTGTGAAGACACTGCTGGAACTGCTAGCTGCAAGGATTGAGAAATGGCATGCATTA 3307
QY 2946 GCTCACTTTCATTTAATCCATTTGCAAGGATGACATGCTTTCTTCCACAGTAAGTTCAGTTC 3005
DB 3308 GCTCACTTTCATTTAATCCATTTGCAAGGATGACATGCTTTCTTCCACAGTAAGTTCAGTTC 3367
QY 3006 AAGTACTATGGTGGTTCCTACAGTGCATGTTTGGAAATCGATCATGCTTTCTTCAAGGTG 3065
DB 3368 AAGTACTATGGTGGTTCCTACAGTGCATGTTTGGAAATCGATCATGCTTTCTTCAAGGTG 3427
QY 3066 ACAGGTCTAAGAGAGAAGAACTCAGGAGACAGGTAGAGGACATGCTTTTTCACACTTCCA 3125
DB 3428 ACAGGTCTAAGAGAGAAGAACTCAGGAGACAGGTAGAGGACATGCTTTTTCACACTTCCA 3487
QY 3126 AGGTGCTTGATCAACATCTCCCTGACACACAACTAGAGCCAGGGCTCCGTTGAAT 3185
DB 3488 AGGTGCTTGATCAACATCTCCCTGACACACAACTAGAGCCAGGGCTCCGTTGAAT 3547
QY 3186 -CCAGAGCATGCTGATAGAACTCATTTCTACTGTTCTTCTAAGTGTGGAGTGAATGA 3244
DB 3548 CCCAGAGCATGCTGATAGAACTCATTTCTACTGTTCTTCTAAGTGTGGAGTGAATGA 3607
QY 3245 AATTCACATGTAATGTTACACCTCTGAAGTGGGTACCAAGTCTCTTAAATCTTTTGTATT 3304
DB 3608 AATTCACATGTAATGTTACACCTCTGAAGTGGGTACCAAGTCTCTTAAATCTTTTGTATT 3667
QY 3305 TGTCTACAGTGTGTTGAGCAGTCTGAGCAGACAAAGCAGACACTCAATAATGCTAGATTTA 3364
DB 3668 TGTCTACAGTGTGTTGAGCAGTCTGAGCAGACAAAGCAGACACTCAATAATGCTAGATTTA 3727
QY 3365 CACA 3368
DB 3728 CAAA 3731

RESULT 5
AA259465
ID AA259465 standard; DNA; 2418 BP.
XX
AC AA259465;
DT
DT 11-APR-2000 (first entry)
DE Human MPROT15 coding sequence #1.
XX
KW MPROT15; treatment; hypertension; human; myocardial disease; apoplexy;
KW heart disease; apoplexy; heart disease; nervous denaturation; ds;
KW Alzheimer's disease; hormone; cytokine.
XX
OS Homo sapiens.
XX
PN JP11318472-A.
XX
PD 24-NOV-1999.
XX
PF 22-JAN-1999; 99JP-0014949.
XX
PR 13-MAY-1998; 98GB-0010373.
PR 18-AUG-1998; 98GB-0018009.
XX
PA (SWIK) SMITHKLINE BEECHAM PLC.
XX
XX WPI: 2000-109268/10.
DR P-PSDB: AAY67310.
XX
PT MPROT15 polypeptide and MPROT15 polynucleotides - useful for the
PT treatment of hypertension, myocardial diseases, apoplexy, heart
PT diseases, nervous denaturation, Alzheimer's disease etc.
XX
PS Claim 7; Page 14; 22pp; Japanese.

xx This is the coding sequence of human MPROT15. The MPROT15 polynucleotide
CC and polypeptide sequences can be used for the treatment of hypertension,
CC myocardial diseases, apoplexy, heart diseases, nervous denaturation,
CC Alzheimer's disease and diseases related to the processing of peptide
CC hormones and cytokines.
xx
SQ Sequence 2418 BP; 744 A; 484 C; 555 G; 635 T; 0 other;

Query Match 71.2%; Score 2416.4; DB 21; Length 2418;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2417; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 82 ATGTCAAGCTCTTCTCTGGCTCTCTCAGCCTTGTGTCTTAAGTCTGCTCAGTCCACC 141
DB 1 ATGTCAAGCTCTTCTCTGGCTCTCTCAGCCTTGTGTCTTAAGTCTGCTCAGTCCACC 60
QY 142 ATTGAGGAACAGCCCAAGACATTTTGGACAAGTTTAAACCACGAGCCGAGAGACTGTC 201
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DB 541 GAAGATATGCTCTTGAAGAAATGAGATGCGCAAGCAGCAAAATCATTTAGAGACTATGG 600
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RESULT 6
AAS14880
ID AAS14880 standard; cDNA; 2920 BP.
XX
AC AAS14880;
XX
DT 20-DEC-2001 (first entry)
XX
DE Human cDNA encoding novel human protein NHP #1.
XX
KW Human; novel human protein; NHP; ss; antidiabetic; antirheumatic;
KW antiarthritic; cytostatic; antiarteriosclerotic; vulnerary;
KW neuroprotective; nootropic; antiparkinsonian;
KW anti-human immunodeficiency virus; antisthmatic; vasotropic; cardiant;
KW hypotensive; anorectic; antiinfertility; neuroleptic; anticonvulsant;
KW antimanic; immunosuppressive; cerebroprotective; antimicrobial;
KW antiinflammatory; antibacterial; antipsoriatic; thyromimetic;
KW immunomodulator; antiseborrheic; dermatological; vasoconstriction;
KW gastrointestinal disorder; cardiovascular disorder; hypertension;
KW coronary heart disease; arteriosclerosis; anorexia; obesity; bulimia;
KW cachexia; male infertility; impotence; testicular cancer; lung tumour;
KW hyperproliferative disorder; pulmonary system disorder;
KW central nervous system disorder; bone disorder;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; schizophrenia; mania; dementia; paranoia;
KW panic disorder; learning disorder; amyotrophic lateral sclerosis;
KW psychosis; autism; sleep disorder; immune system disorder;
KW Hashimoto's thyroiditis; musculo-skeletal system disorders;
KW multiple sclerosis; ischaemic brain injury; stroke; infectious disease;
KW diabetes mellitus; immunological disorder; asthma; AIDS;
KW acquired immunodeficient syndrome; leukaemia; rheumatoid arthritis;
KW inflammatory bowel disease; sepsis; acne; psoriasis; lupus erythematosus;
KW neural system disorder; respiratory disorder; olfactory disorder;
KW wound healing; chromosome X.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 213..2348
FT /*CDS= a
FT /product= "NHP #1"
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/transl_except= (pos:1707..1709,aa:Xaa)
/note= "Xaa= Any amino acid"

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WO200174896-A1.

11-OCT-2001.

02-APR-2001; 2001WO-US10542.

03-APR-2000: 2000US-194718P

29-SEP-2000; 2000US-236384P.

(HUMA-) HUMAN GENOME SCI INC.

Moore PA, Ni J, Soppet DR, Coleman TA, Gentz RL, Endress GA;

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P-PSDB; AAU09092.

New human protein

disorders, autoimmune disorders and reproductive disorders -

СІДІВНИК 1, PAGE 231-232, STOPP, ENGLISH.

the invention relates to novel human proteins (NHP) and the nucleic acids that encode them and antibodies raised against them. The proteins, antibodies and nucleic acids are useful in the diagnosis, prognosis, prevention and/or treatment of diseases and/or disorders involving vasoconstriction, gastrointestinal disorders, cardiovascular disorders (e.g. hypertension, erectile dysfunction, high blood pressure, coronary heart disease and arteriosclerosis), anorexia, obesity, bulimia, cachexia, disorders of small intestine, disorders of reproductive system (e.g. male infertility and/or impotence), testicular cancer, lung tumours and other hyperproliferative disorders, disorders of pulmonary system, central nervous system disorders, bone disorders, neurodegenerative diseases and behavioural disorders (e.g. Alzheimer's disease, Parkinson's disease, Huntington's disease, schizophrenia, mania, dementia, paranoia, panic disorder, learning disabilities, amyotrophic lateral sclerosis, psychoses, autism, sleep disorders), immune system disorders (e.g. Hashimoto's thyroiditis), renal and musculo-skeletal system disorders, central nervous system disorders (e.g. multiple sclerosis, ischaemic brain injury and/or stroke), infectious diseases, diabetes mellitus, immunological disorders (e.g. asthma, acquired immunodeficient syndrome (AIDS), leukaemia, rheumatoid arthritis, inflammatory bowel disease, sepsis, acne, psoriasis and lupus erythematosus), neural system disorders, respiratory disorders, olfactory disorders and wound healing. The present sequence encodes an NHP of the invention and is located on the X chromosome.

Sequence 2920 BP: 897 A; 568 C; 654 G; 788 T; 13 other:

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every Match          67.7%; Score 2297.4; DB 22; Length 2920;
1st Local Similarity 99.3%; Pred. NO. 0;
atches 233; Conservative 4; Mismatches 11; Indels 2; Gaps 2

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180	Db	AACACCAATATTACTGAAGAGAAATGTCAAAACATGAATAATGCTGGGGACAAATGGTCT	233
232	Qy	GCCTTTTAAAGAAACAGTCCACACTTGCCAAATGTATCCACTACAGAATAATTCAGAAT	351
240	Db	GCCTTTTAAAGAAACAGTCCACACTTGCCAAATGTATCCACTACAGAATAATTCAGAAT	299
352	Qy	CTCAGAGTCAAGCTTCAGGCTCAGAGGCTCTTCACGAAATGGGTCTTCAGTGTCTCGAGAA	411
300	Db	CTCAGAGTCAAGCTTCAGGCTCAGAGGCTCTTCACGAAATGGGTCTTCAGTGTCTCGAGAA	359
412	Qy	GACAGAGCAAAACGGTTGAACACAATTCATAATACAAATGAGCACCATCTACAGTACTGGA	471
360	Db	GACAGAGCAAAACGGTTGAACACAATTCATAATACAAATGAGCACCATCTACAGTACTGGA	419
472	Qy	AAAGTTTGTAAACCCAGATAATCCACAGAAGTCTTATCTTGAACACAGGTTTGAATGAA	531
420	Db	AAAGTTTGTAAACCCAGATAATCCACAGAAGTCTTATCTTGAACACAGGTTTGAATGAA	479
532	Qy	ATAATGGCAAAACAGTTTAGACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCT	599
480	Db	ATAATGGCAAAACAGTTTAGACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCT	539
592	Qy	GAGGTCGCGACAGCTGAGGCCATATATGAAGAGTATGTGGTCTTGAATAATTCAGATG	651
540	Db	GAGGTCGCGACAGCTGAGGCCATATATGAAGAGTATGTGGTCTTGAATAATTCAGATG	599
652	Qy	GCAAGACAAATCATATCAGGACTATGGGATTTATGGAGAGAGACTATGAAGTAAAT	711
600	Db	GCAAGACAAATCATATCAGGACTATGGGATTTATGGAGAGAGACTATGAAGTAAAT	659
712	Qy	GGGTAGATGGCTATGACTACAGCCCGGCCAGTTGATGAAGATGTGGAACATACCTTTT	771
660	Db	GGGTAGATGGCTATGACTACAGCCCGGCCAGTTGATGAAGATGTGGAACATACCTTTT	719
772	Qy	GAAGAGATTAAACCATTTATGAACATCTTCATGCCCTATGTGAGGCGAAAGTTGATGAAT	831
720	Db	GAAGAGATTAAACCATTTATGAACATCTTCATGCCCTATGTGAGGCGAAAGTTGATGAAT	779
832	Qy	GCCTATCTCTCTATATCAGTCCAAATGGATGCCCTCCCTGCTCATTTGCTTGGTGATG	891
780	Db	GCCTATCTCTCTATATCAGTCCAAATGGATGCCCTCCCTGCTCATTTGCTTGGTGATG	839
892	Qy	TGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTTGGACAGAAACCAAAAC	951
840	Db	TGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTTGGACAGAAACCAAAAC	899
952	Qy	ATAGATGTTACTGATGCAATGGTGGACAGGCGCTGGGATGCACAGAGAAATATTCAGAGG	1011
900	Db	ATAGATGTTACTGATGCAATGGTGGACAGGCGCTGGGATGCACAGAGAAATATTCAGAGG	959
1012	Qy	GCCGAGAGTCTCTTGTATCTGTTGGTCTTCTTAATGACTCAAGGATTCCTGGGAAAT	1071
960	Db	GCCGAGAGTCTCTTGTATCTGTTGGTCTTCTTAATGACTCAAGGATTCCTGGGAAAT	1019
1072	Qy	TCCATGCTAACGGACCCAGGAAATGTTTCAGAAAGCAGTCTGCCATCCACAGCTTGGGAC	1131
1020	Db	TCCATGCTAACGGACCCAGGAAATGTTTCAGAAAGCAGTCTGCCATCCACAGCTTGGGAC	1079
1132	Qy	CTGGGAGAGGGCGACTTCAGGATCTCTTATGTGCAAAAGTGCAATGGAGGACTTCTCTG	1199
1080	Db	CTGGGAGAGGGCGACTTCAGGATCTCTTATGTGCAAAAGTGCAATGGAGGACTTCTCTG	1139
1192	Qy	ACAGCTCATCATGAGATGGGCAATCCAGTATGATATGATATGCTGCAACACCTTTT	1259
1140	Db	ACAGCTCATCATGAGATGGGCAATCCAGTATGATATGATATGCTGCAACACCTTTT	1199
1252	Qy	CTGCTTAAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGGGGAAATCATGTCACTT	1319
1200	Db	CTGCTTAAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGGGGAAATCATGTCACTT	1259
1312	Qy	TCTGCAGGCACACTTAAAGCAATTTAAATTCATTTGGTCTTCTGTACCCGGATTTTCAGAA	1379
1260	Db	TCTGCAGGCACACTTAAAGCAATTTAAATTCATTTGGTCTTCTGTACCCGGATTTTCAGAA	1319

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QY 1372 GACAAATGAACAGAAATAAACTTCTGCTCAAAACAGCACTCACGATGTTGGGACTCTG 1431
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Db 1320 GACAATGAACAGAAATAAACTTCTGCTCAAAACAGCACTCACGATGTTGGGACTCTG 1379
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QY 1432 CCATTACTTACATGTTAGAGAAGTGGAGGTGGATGCTTTAAAGGGGAAATTCCTCAAA 1491
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Db 1380 CCATTACTTACATGTTAGAGAAGTGGAGGTGGATGCTTTAAAGGGGAAATTCCTCAAA 1439
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QY 1492 GACCAAGTGGATGAAGAGTGTGGGAGATGAAGCCAGAGATAGTTGGGTGTGGGAACCT 1551
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Db 1440 GACCAGTGGATGAAGAGTGTGGGAGATGAAGCCAGAGATAGTTGGGTGTGGGAACCT 1499
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QY 1552 GTGCCCATGATGAACATACATGTCACCCCGCATCTCTGTTCCATGTTTCTAATGATTAC 1611
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QY 1612 TCATTTCATTCGATATTACACAAGGACCCCTTTACCAATTCAGTTTCAAGAAGCACTTTGT 1671
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Db 1560 TCATTTCATTCGATATTACACAAGGACCCCTTTACCAATTCAGTTTCAAGAAGCACTTTGT 1619
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QY 1672 CAAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAAGCT 1731
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Db 1620 CAAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAAGCT 1679
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QY 1732 GGACAGAACTGTTCAATATGCTGAGGCTTGGAAATCAGAACCCCTGGACCCTAGCATTTG 1791
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Db 1680 GGACAGAACTGTTCAATATGCTGAGGCTTGGAAATCAGAACCCCTGGACCCTAGCATTTG 1739
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QY 1792 GAAATGTTAGAGCAAGAAAGATGAATGTAAGCCACTGCTCAACTACTTTAGAGCC 1851
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QY 1852 TTATTTACCTGGCTGAAGACACAGAACAGAAATCTTTTGTGGATGGAGTACCGACTCG 1911
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Db 1800 TTATTTACCTGGCTGAAGACACAGAACAGAAATCTTTTGTGGATGGAGTACCGACTCG 1859
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QY 1912 AGTCCATATGAGCAAGCAAGCAATCAAGTGAAGGATAAGCCTAAATCAGCTCTTTGGAGAT 1971
|||||
Db 1860 AGTCCATATGAGCAAGCAAGCAATCAAGTGAAGGATAAGCCTAAATCAGCTCTTTGGAGAT 1919
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QY 1972 AAAGCATATGAATGAAGCAGCAATGAATGTACCTGTTCCGATCATCTCTTGCATATGCT 2031
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Db 1920 AAAGCATATGAATGAAGCAGCAATGAATGTACCTGTTCCGATCATCTCTTGCATATGCT 1979
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QY 2032 ATGAGGAGTACTTTTAAAGTAAAAATCAGATGATCTTTTGGGAGGAGGATGTC 2091
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Db 1980 ATGAGGAGTACTTTTAAAGTAAAAATCAGATGATCTTTTGGGAGGAGGATGTC 2039
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QY 2092 CGAGTGGCTAATTTGAAACCAAGCAATCTCCTTTAATTTCTTTGTCACCTGACCTAAAAAT 2151
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Db 2040 CGAGTGGCTAATTTGAAACCAAGCAATCTCCTTTAATTTCTTTGTCACCTGACCTAAAAAT 2099
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QY 2152 GTGTCTGATATCATTCTTAGAAGTGAAGTGAAGGCGCATCAGATGTCCTGGAGCCGT 2211
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Db 2100 GTGTCTGATATCATTCTTAGAAGTGAAGTGAAGGCGCATCAGATGTCCTGGAGCCGT 2159
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QY 2212 ATCAATGATGTTTCCGCTCTGAATCACAACAGCCTAGAGTTTCTGGGATACAGCCAAACA 2271
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Db 2160 ATCAATGATGTTTCCGCTCTGAATCACAACAGCCTAGAGTTTCTGGGATACAGCCAAACA 2219
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QY 2272 CTTGGACCTCCTAACACAGCCCTCTTTCCATATGCTGATGTTTGTGAGTTGTGATG 2331
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Db 2220 CTTGGACCTCCTAACACAGCCCTCTTTCCATATGCTGATGTTTGTGAGTTGTGATG 2279
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QY 2332 GGAGTGATGTTGGTGGATGTCATCTGATCTTCACTGGGATCAGATCGGAGAAG 2391
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Db 2280 GGAGTGATGTTGGTGGATGTCATCTGATCTTCACTGGGATCAGATCGGAGAAG 2339
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RESULT 7

AAS14890

ID AAS14890 standard; cDNA; 2911 BP.

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XX AAS14890;
AC 20-DEC-2001 (first entry)
DT Human cDNA encoding novel human protein NHP #11.
XX
XX Human; novel human protein; NHP; ss; antidiabetic; antirheumatic;
KW antiarthritic; cytotropic; antiarteriosclerotic; vulnerary;
KW neuroprotective; nootropic; antiparkinsonian;
KW anti-human immunodeficiency virus; antiasthmatic; vasotropic; cardiant;
KW hypotensive; anorectic; antiinfertility; neuroleptic; anticonvulsant;
KW antianemic; immunosuppressive; cerebroprotective; antimicrobial;
KW antiinflammatory; antibacterial; antiparasitic; thyromimetic;
KW immunomodulator; antiseborrheic; dermatological; vasoconstriction;
KW gastrointestinal disorder; cardiovascular disorder; hypertension;
KW coronary heart disease; arteriosclerosis; anorexia; obesity; bulimia;
KW cachexia; male infertility; impotence; testicular cancer; lung tumour;
KW hyperproliferative disorder; pulmonary system disorder;
KW central nervous system disorder; bone disorder;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; schizophrenia; mania; dementia; paranoia;
KW panic disorder; learning disability; amyotrophic lateral sclerosis;
KW psychosis; autism; sleep disorder; immune system disorder;
KW Hashimoto's thyroiditis; musculo-skeletal system disorders;
KW multiple sclerosis; ischaemic brain injury; stroke; infectious disease;
KW diabetes mellitus; immunological disorder; asthma; AIDS;
KW acquired immunodeficient syndrome; leukaemia; rheumatoid arthritis;
KW inflammatory bowel disease; sepsis; acne; psoriasis; lupus erythematosus;
KW neural system disorder; respiratory disorder; olfactory disorder;
KW wound healing.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
FH CDS 213..998
FT /*tag= a
FT /product= "NHP #11"
XX
XX WQ200174896-A1.
XX
XX 11-OCT-2001.
XX
XX 02-APR-2001; 2001WQ-US10542.
XX
XX 03-APR-2000; 2000US-194118P.
XX 29-SEP-2000; 2000US-236384P.
XX
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Moore PA, Ni J, Soppet DR, Coleman TA, Gentz RL, Endress GA;
PI Li Y, Dillon PJ;
XX
XX WPI; 2001-626394/72.
DR P-PSDB; AAU09102.
XX
XX New human proteins, useful for diagnosing, treating, preventing and/or
PT prognosing disorders related to the proteins, including cardiovascular
PT disorders, autoimmune disorders and reproductive disorders -
XX
XX Claim 1; Page 297-298; 318pp; English.
XX
XX The invention relates to novel human proteins (NHP) and the
CC nucleic acids that encode them and antibodies raised against them.
CC The proteins, antibodies and nucleic acids are useful in the diagnosis,
CC prognosis, prevention and/or treatment of diseases and/or disorders
CC involving vasoconstriction, gastrointestinal disorders, cardiovascular
CC disorders (e.g. hypertension, erectile dysfunction, high blood pressure,
CC coronary heart disease and arteriosclerosis), anorexia, obesity, bulimia,
CC cachexia, disorders of small intestine, disorders of reproductive system
CC (e.g. male infertility and/or impotence), testicular cancer, lung tumours
CC and other hyperproliferative disorders, disorders of pulmonary system,
CC central nervous system disorders, bone disorders, neurodegenerative
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CC diseases and behavioural disorders (e.g. Alzheimer's disease, Parkinson's
CC disease, Huntington's disease, schizophrenia, mania, dementia, paranoia,
CC panic disorder, learning disabilities, amyotrophic lateral sclerosis,
CC psychoses, autism, sleep disorders), immune system disorders (e.g.
CC Hashimoto's thyroiditis), renal and musculo-skeletal system disorders,
CC central nervous system disorders (e.g. multiple sclerosis, ischaemic
CC brain injury and/or stroke), infectious diseases, diabetes mellitus,
CC immunological disorders (e.g. asthma, acquired immunodeficient syndrome
CC (AIDS), leukaemia, rheumatoid arthritis, inflammatory bowel disease,
CC sepsis, acne, psoriasis and lupus erythematosus), neural system
CC disorders, respiratory disorders, olfactory disorders and wound
CC healing. The present sequence encodes an NHP of the invention.
XX
SQ

Sequence 2911 BP; 896 A; 570 C; 655 G; 788 T; 2 other;

Query Match	67.0%;	Score 2275;	DB 22;	Length 2911;
Best Local Similarity	99.4%;	Pred. No. 0;		
Matches 2325;	Conservative 0;	Mismatches 11;	Indels 4;	Gaps 4;
QY 53	GGGGCAGGTATCTTGGCTCACAGGGGACGATGTCAAGCTCTTCTCGCTCTCTTCTCAGCC	112		
Db 1	GTGGATGTGATCTTGGCTCTCCCGGGGACGATGTC-AGCTCTTCTCGCTCTCTTCTCAGCC	59		
QY 113	TTGTTGCTTAAGTCTGCTGCTCAGTCCACCAATTGAGGACAGGCCAAGACATTTTTT-GGAC	171		
Db 60	TTGTTGCTGTAAGTCTGCTGCTCAGTCCACCAATTGAGGACAGGCCAAGACATTTTTTGGGAC	119		
QY 172	AAGTTTAAACACAGGACGACCTGTTCTATCAAAAGTTTCACTTGCTCTTGGAAATAT	231		
Db 120	AAGTTTAAACACAGGACGACCTGTTCTATCAAAAGTTTCACTTGCTCTTGGAAATAT	179		
QY 232	AACACCAATATTACTGAAGAGATGTCACAAACATGAATATGCTGGGACAAATGGTCT	291		
Db 180	AACACCAATATTACTGAAGAGATGTCACAAACATGAATATGCTGGGACAAATGGTCT	239		
QY 292	GCCTTTTAAAGAACAGTCCACATTTGCCAAATGATATCCACTACAGAAATTCAGAA	351		
Db 240	GCCTTTTAAAGAACAGTCCACATTTGCCAAATGATATCCACTACAGAAATTCAGAA	299		
QY 352	CTCACAGTCAAGCTTCAGCTGCAAGGCTCTTTCAGCAAAATGGGCTTTCAGTGTCTCAGAA	411		
Db 300	CTCACAGTCAAGCTTCAGCTGCAAGGCTCTTTCAGCAAAATGGGCTTTCAGTGTCTCAGAA	359		
QY 412	GACAGAGCAACGGTTGACACAAATCTTAATACATGAGCACCCTCAGACTACAGTACGGA	471		
Db 360	GACAGAGCAACGGTTGACACAAATCTTAATACATGAGCACCCTCAGACTACAGTACGGA	419		
QY 472	AAAGTTTGAACCCAGATATCCACAAAGATGCTTATTACTTGAACCCAGGTTTCAATGAA	531		
Db 420	AAAGTTTGAACCCAGATATCCACAAAGATGCTTATTACTTGAACCCAGGTTTCAATGAA	479		
QY 532	ATAATGGCAACAGTTTACACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCT	591		
Db 480	ATAATGGCAACAGTTTACACTACAAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGATCT	539		
QY 592	GAGTGGCAACAGCTGAGGCTATATGAGAGATGCTGGTCTTGAAGAAATGAGATG	651		
Db 540	GAGTGGCAACAGCTGAGGCTATATGAGAGATGCTGGTCTTGAAGAAATGAGATG	599		
QY 652	GCAAGAGCAAAATCATTTAGGACTATGGGATTTTGGAGAGGAGACTATGAAGTAAAT	711		
Db 600	GCAAGAGCAAAATCATTTAGGACTATGGGATTTTGGAGAGGAGACTATGAAGTAAAT	659		
QY 712	GGGGTAGATGGGTATGACTACAGCCGGGCGGCTGAGTGAAGTGGAGATGACCTTTT	771		
Db 660	GGGGTAGATGGGTATGACTACAGCCGGGCGGCTGAGTGAAGTGGAGATGACCTTTT	719		
QY 772	GAAGAGATTAACCATTTATGAAACATCTTCATGCCCTATCTGAGGGCAAAAGTTGATGAAT	831		
Db 720	GAAGAGATTAACCATTTATGAAACATCTTCATGCCCTATCTGAGGGCAAAAGTTGATGAAT	779		
QY 832	GCCTATCTCTTATATCAGTCCCAATTTGGATGGCTCTCCCTCATTTTGGTGGATG	891		

Db 780	GCCTATCTCTTATATATAGTCCAAATGGATGGCTCCCTGCTCATTTGCTTGGTATATG	839		
QY 892	TGGGTAGATTTTGGACAAATCTGTACTCTTTTGACAGTTCCCTTTGGACAGAAACCAAAAC	951		
Db 840	TGGGTAGATTTTGGACAAATCTGTACTCTTTTGACAGTTCCCTTTGGACAGAAACCAAAAC	899		
QY 952	ATAGATGTTACTGATGCAATGTTGGACAGGCTGGATGACAGAGAAATATTCAGAGAG	1011		
Db 900	ATAGATGTTACTGATGCAATGTTGGACAGGCTGGATGACAGAGAAATATTCAGAGAG	959		
QY 1012	GCAGAGAGTCTTGTGTATCTGTGTCTCTTCCCTAATATGACTCAAGGATTTCTGGGAAAT	1071		
Db 960	GCAGAGAGTCTTGTGTATCTGTGTCTCTTCCCTAATATGACTCAAGGATTTCTGGGAAAT	1018		
QY 1072	TCCATGCTTAACGACCCAGGAAATGTTTCAGAAAGCAGTCTGCCATCCACAGCTTGGGAC	1131		
Db 1019	TCCATGCTTAACGACCCAGGAAATGTTTCAGAAAGCAGTCTGCCATCCACAGCTTGGGAC	1078		
QY 1132	CTGGGGAAGGGGACTTTCAGGATTCCTTATGTGCACAAAGTGACATGGAGGACTTCTCTG	1191		
Db 1079	CTGGGGAAGGGGACTTTCAGGATTCCTTATGTGCACAAAGTGACATGGAGGACTTCTCTG	1138		
QY 1192	ACAGCTCATCATGAGATGGGATATCCAGTATGATATGATGATGCTGCACAAACCTTTT	1251		
Db 1139	ACAGCTCATCATGAGATGGGATATCCAGTATGATATGATGATGCTGCACAAACCTTTT	1198		
QY 1252	CTGTAAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGTTGGGAAATCATGTCACTT	1311		
Db 1199	CTGTAAAGAAATGGAGCTAATGAAGGATTCATGAAGCTGTGTTGGGAAATCATGTCACTT	1258		
QY 1312	TCGTGACCCACACCTTAAGCATTTAAATGCATTTGGTCTTCTGTCAACCCGATTTTCAGAA	1371		
Db 1259	TCGTGACCCACACCTTAAGCATTTAAATGCATTTGGTCTTCTGTCAACCCGATTTTCAGAA	1318		
QY 1372	GACAAATGAACAGAAATAAATCTCTGCTCAAAACAGCACTCACGATTTGTTGGACTCTG	1431		
Db 1319	GACAAATGAACAGAAATAAATCTCTGCTCAAAACAGCACTCACGATTTGTTGGACTCTG	1378		
QY 1432	CCATTTACTTACATGTTAGAGAGTGGAGTGGATGCTTTTAAAGGGGAAATTTCCCAA	1491		
Db 1379	CCATTTACTTACATGTTAGAGAGTGGAGTGGATGCTTTTAAAGGGGAAATTTCCCAA	1438		
QY 1492	GACCAAGTGAATGAAGTGGTGGAGATGAACGGAGAGATGTTGGGTTGGTGGACCT	1551		
Db 1439	GACCAAGTGAATGAAGTGGTGGAGATGAACGGAGAGATGTTGGGTTGGTGGACCT	1498		
QY 1552	GTGCCCCATGATGAACATACCTGTGACCCCGCATCTCTGTTCCATGTTTCTAATGATAC	1611		
Db 1499	GTGCCCCATGATGAACATACCTGTGACCCCGCATCTCTGTTCCATGTTTCTAATGATAC	1558		
QY 1612	TCATTTCAATTCGATTTACACAGGACCTTTTACCAATTCAGTTTCAAGAGCACTTTGT	1671		
Db 1559	TCATTTCAATTCGATTTACACAGGACCTTTTACCAATTCAGTTTCAAGAGCACTTTGT	1618		
QY 1672	CAAGCAGCTTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAGCT	1731		
Db 1619	CAAGCAGCTTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAGCT	1677		
QY 1732	GGACAGAACTGTTCAATATGCTGAGGCTTGGAAATTCAGAACCCCTGAGACCTTACATTTG	1791		
Db 1678	GGACAGAACTGTTCAATATGCTGAGGCTTGGAAATTCAGAACCCCTGAGACCTTACATTTG	1737		
QY 1792	GAAATGTTGTAGGAGCAAGACATGAATGTAAAGCCCTGCTCAACTACTTTGAGCCC	1851		
Db 1738	GAAATGTTGTAGGAGCAAGACATGAATGTAAAGCCCTGCTCAACTACTTTGAGCCC	1797		
QY 1852	TTATTTACCTGCTGCTGAAAGCCAGAAAGAAATCTCTTTTGGGATGGAGTACGACTGG	1911		
Db 1798	TTATTTACCTGCTGCTGAAAGCCAGAAAGAAATCTCTTTTGGGATGGAGTACGACTGG	1857		
QY 1912	AGTCCATATGCAGACCAAGCATCAAGTGAAGATGAAGCTTAAATCAGCTCTTTGGAGAT	1971		
Db 1858	AGTCCATATGCAGACCAAGCATCAAGTGAAGATGAAGCTTAAATCAGCTCTTTGGAGAT	1917		

QY 1972 AAAGCATATGAATGGAACGCAATGAATGTAACCTGTTCCTGATCATCTCTGTCATATGCT 2031
DB 1918 AAAGCATATGAATGGAACGCAATGAATGTAACCTGTTCCTGATCATCTCTGTCATATGCT 1977
QY 2032 ATGAGGAGTACTTTTAAAGTAAATAATCAGATGATCTTTTGGGAGGAGGATGTC 2091
DB 1978 ATGAGGAGTACTTTTAAAGTAAATAATCAGATGATCTTTTGGGAGGAGGATGTC 2037
QY 2092 CGAGTGGCTAATTTGAACCAAGAAATCTCCTTTTATTTCTTGTGCTACCTGCACCTAAATAAT 2151
DB 2038 CGAGTGGCTAATTTGAACCAAGAAATCTCCTTTTATTTCTTGTGCTACCTGCACCTAAATAAT 2097
QY 2152 GTGCTGTATATATCTTCACTAGCACTGAAGTGAAGGCAATCAGATGTCCTGGAGCCGT 2211
DB 2098 GTGCTGTATATATCTTCACTAGCACTGAAGTGAAGGCAATCAGATGTCCTGGAGCCGT 2157
QY 2212 ATCAATGATGCTTTCCCTCTGTAATGACAACAGCTAGAGTTCTGGGATACAGCCAA 2271
DB 2158 ATCAATGATGCTTTCCCTCTGTAATGACAACAGCTAGAGTTCTGGGATACAGCCAA 2217
QY 2272 CTGGGACCTCTAACCAGCCCTCTGTTTCCATATGGCTGATTTTGGAGTTGTGATG 2331
DB 2218 CTGGGACCTCTAACCAGCCCTCTGTTTCCATATGGCTGATTTTGGAGTTGTGATG 2277
QY 2332 GGAGTCATATGCTTGGCATGTCATCTGATCTCACTGGGATCAGAGTGGGAAGAG 2391
DB 2278 GGAGTCATATGCTTGGCATGTCATCTGATCTCACTGGGATCAGAGTGGGAAGAG 2337

RESULT 8

AAS42515

ID AAS42515 standard; cDNA; 3474 BP.

AC AAS42515;

XX

DT 18-DEC-2001 (first entry)

XX

DE Human cDNA encoding an mdt protein, clone LI:347572.1:2000MAY01.

XX

KW Human; molecules for disease detection and treatment; mdt; ss;
KW Antiarteriosclerotic; hepatotropic; antiposioratic; cytostatic;
KW immunosuppressive; antidiabetic; antisthmatic; neuroprotective;
KW osteopathic; antiarthritic; cell proliferative disorder;
KW arteriosclerosis; cirrhosis; psoriasis; cancer; adenocarcinoma;
KW leukaemia; breast cancer; autoimmune disorder; AIDS;
KW acquired immunodeficiency syndrome; Addison's disease;
KW diabetes mellitus; asthma; multiple sclerosis; osteoarthritis.

XX Homo sapiens.

OS

XX

PN WO200162922-A2.

XX

PD 30-AUG-2001.

XX

PF 21-FEB-2001; 2001WO-US05896.

XX

PR 24-FEB-2000; 2000US-0185213.

PR 16-MAY-2000; 2000US-0205232.

PR 17-MAY-2000; 2000US-0205285.

PR 17-MAY-2000; 2000US-0205286.

PR 17-MAY-2000; 2000US-0205287.

PR 17-MAY-2000; 2000US-0205323.

PR 17-MAY-2000; 2000US-0205324.

XX

XX (INCY-) INCYTE GENOMICS INC.

PA

PI Panzer SR, Spiro PA, Banville SC, Shah P, Chalup MS, Chang SC;
PI Chen A, D'Sa SA, Amshey S, Dahl CR, Dam TC, Daniels SE;
PI Dufour GE, Flores V, Fong WT, Greenwalt LB, Hillman JL, Jones AL;
PI Liu TF, Roseberry AM, Rosen BH, Russo FD, Stockdrehner TK, Daffo A;
PI Wright RJ, Yap PE, Yu JY, Bradley DL, Bratcher SR, Chen W;
PI Cohen HJ, Hodgson DM, Lincoln SE, Jackson S;

XX

DR WPI; 2001-570631/64.
DR P-PSDB; AAU25463.

XX

PT New disease detection and treatment molecule polynucleotides and
PT polypeptides, useful for diagnosis and treatment of arteriosclerosis,
PT cirrhosis, psoriasis, cancer, autoimmune disorders, diabetes mellitus,
PT asthma and multiple sclerosis.

XX

PS Claim 1; Page 139-140; 183pp; English.

XX

CC The invention relates to novel human molecules for disease
CC detection and treatment (mdt proteins) and the polynucleotides encoding
CC them. The MDT polynucleotides and polypeptides are useful for diagnostic
CC and therapeutic purposes e.g. to diagnose and treat cell proliferative
CC disorders (e.g. arteriosclerosis, cirrhosis and psoriasis) cancers (e.g.
CC adenocarcinoma, leukaemia and breast cancer) autoimmune disorders
CC (e.g. acquired immunodeficiency syndrome (AIDS) and Addison's disease)
CC diabetes mellitus, asthma, multiple sclerosis, osteoarthritis, and many
CC more diseases given in the specification. The present sequence
CC encodes an mdt protein of the invention.

XX

SQ Sequence 3474 BP; 1019 A; 696 C; 781 G; 978 T; 0 other;

Query Match 60.8%; Score 2065.2; DB 22; Length 3474;
Best Local Similarity 88.4%; Pred. No. 0;
Matches 3053; Conservative 0; Mismatches 253; Indels 146; Gaps 69;

QY 66 TGGCTCAGGAGGAGATGTCAGGCT-CTTCTGGCTCTCTCTCAGCTTGTCTGTAA 124
DB 23 TGGCTCAGGAGGAGATGTCAGGCTCTTCTGGCTCTCTCTCAGCTTGTCTGTAA 82

QY 125 CT--GCTGCTCAGTCCACCATTTGAGAACAGGCAAGACATTTTGGACAAGTTAA 182
DB 83 ACTGGCTGCTCAGTCCACCATTTGAGAACAGGCAAGACATTTTGGACAAGTTAA 142

QY 183 CGAAGCGAAGACCTGTTCTATCAAAAGTTTCACTCTCTCTGGGCAAAATGCTG 240
DB 143 CGAAGCGAAGACCTGTTCTATCAAAAGTTTCACTCTCTGGGCAAAATGCTG 202

QY 241 ATTACTGAAGAGATGTCCTCAA-AACATGAATATGCTGGGCAAAATGCTG 292
DB 203 ATTACTGAAGAGATGTCCTCAAACATCAATGCTGGGCAAAATGCTGCTAG 262

QY 293 --CGTTTTTAAGGAACAGTCCACACTTGGCCCAA-ATGTCACCTACACAA 343
DB 263 CCCTTTTACAAAGGAACAGTCCACACTTGGCCCAAAGATGATCCACTACAA 322

QY 344 -TTCAGAAATCTCAGATCAAGCTTCAGCTGCAGGC-----TCCTCAGCAAA 391
DB 323 CGACATCTCCACATGTCACGCTTCAGCTGTCAGGCTTCTTCAAGCCATAAA 382

QY 392 GGTCTTCAGTCTGCTC-----AGAAGACAAGACGCAAAACGGTTGAACA 444
DB 383 AGTCTTCAGGTTGGTCTATCAGAGACACAGAGCAAAACGGTTGAACA 442

QY 445 ACAATGA-----GCACCATCTACAGTACTGAAAGTTTGTAAACCCAGATA 495
DB 443 ATACAAATGGAGCCCAATCCTAACAGTAACTGGAACAGCTGTAACCCAGATA 502

QY 496 CAAGATGCTTATTTACTTGAACAGGTTTGAATGAATTAATGGCAACAGTTAG 555
DB 503 CAAGATGCTTATTTACTTGAACAGGTTTGAATGAATTAATGGCAACAGTTAG 562

QY 556 AATGAGAGGCTCTGGGCTTGGAAAGCTGGAGATCTAGGTCGGCAGAGCTGAG 615
DB 563 AATGAGAGGCTCTGGGCTTGGAAAGCTGGAGATCTAGGTCGGCAGAGCTGAG 622

QY 616 TTATATGAAGAGTATGTTGCTTCTGAAATAATGAGATGGCAAGCAAAATCAT 675
DB 623 TTATATGAAGAGTATGTTGCTTCTGAAATAATGAGATGGCAAGCAAAATCAT 682

QY 676 T--ATGGGGATTATGGAGAGGAGATATGAAGTAAATGGGGTAGA---TGGCTATGACT 730

Db	683	TTATTGGGGATTATTGGAGAGAGACTATGAAGTAATGGGTAAATAGTGGATATGATT	742
Qy	731	ACAGCCGGCCAGTGTATTGAAGATGTGAAACATACCT-TTGAGAGAGATTAACCACTT	788
Db	743	ACAGCCGGCCAGTGTATTGAAGATGTGAAACATACCTGTGTGAAGAGATTAACCACTG	802
Qy	789	ATATGAACATCTTCATGCTATGTGTGAGGGCAAGTGTGAATCAATGCCATCCCTTCCTATAT	848
Db	803	ATAGCAACATCTTACGCCCTATGTGAGGSCCAAGTTGATGAATGCCCTATCCTTCCTATAT	862
Qy	849	CAGTCCAATTGGATGCCCTCCCTGCTCATTTGCTTGGTGATATGTG-GGGTAGAATTTTGA	907
Db	863	CAGTCCAATTGGATGCCCTCCCTGCTCATTTGCTTGGTGATATGTGCGGGGTAGATTTTGA	922
Qy	908	CAAAATCTGTACTTCTTGGACAGTTCCTTTGGACAGAAACCAACATAGATGTTACTGATG	967
Db	923	CAAAATCTGTACTTCTTGGACAGTTCCTTTGGACAGAAACCAACATAGATGTTACTGATG	982
Qy	968	CAATGGTGGACACGCGCTGGGATGCACAGAGATAATTCAAGGAGGCG-AGAAGTTCCTT	1026
Db	983	CAATGGTGGACACGCGCTGGGATGCACAGAGATAATTCAAGGAGTCCGCGAGACTTCTTT	1042
Qy	1027	GTATCTGTTGGTCTTCTTAATPATGACTCAAGGATTCG-GGAAATTCATGTCTA-ACGG	1084
Db	1043	GTATCTGTTGGTCTTCTTAATPATGACTCTAGGATTCGTGGCGAAATTCATGTCTA-ACGG	1102
Qy	1085	ACCCAGGAAATCTTCAGAAAGCAGTCTGCCAT-CCACAGCTTTGGGACCTGGGGGAAGGC	1143
Db	1103	ACCCAGGAAATGTTTCAGAAAGCAGTCTGCCATCCCCACAGCTTTGGGACCTGGGGGAAGGC	1162
Qy	1144	GACTTCAG-GATCCTTATGTGCACAAA-GGTGACAATGCAGCACTTCCTGCACAGCTCATC	1201
Db	1163	GACTTCAGAGATCCTTATGTGCACAAAGGTAACAATGCAAGCACTTCCTGCACAGCTCATC	1222
Qy	1202	ATGAGATGGGGATATTCAGTATGATATGCGATATGCTGCACAACC-TTTCCTGCTTAAG-	1259
Db	1223	ATGAGATGGGGATATTCAGTATGATATGCGATATGCGCGCCCAACCTTTTCTGCTTAAGG	1282
Qy	1260	-AAATGGAGCTTAATCAAGGATTCATGAAGCTGTGGGAAATCATGTCACTTCTTCGCAG	1318
Db	1283	AAATGGAGCTTAATGAGAGATTCATGAAGCTGTGGGAAATCATGTCACTTCTTCGCAG	1342
Qy	1319	CCACACCTAAGCATTTAAATCCATTGGTCTCTGTCAACCCGATTTTCAA--GAAGACA	1375
Db	1343	CCACACCTAAGCATTTAAATCCATTGGTCTCTGTCAACCCGAGTTTTCACGAACGACA	1402
Qy	1376	ATGAACAGAAATAAATCTCTGCTCAAAACAGCACTACGATGTTGGGACTCTGCCAT	1435
Db	1403	ATGAACAGAAATAAATCTCTGCTCAAAACAGCACTACGATGTTGGGACTCTGCCAT	1462
Qy	1436	TTACTTACATGTTACAGAAAGTGGAGTGCATGCTTTTAAA-GGGGAAATTTCCCAAGAC	1494
Db	1463	TTACTTACATGTTAGGAAAGTGGAGTGTGTGTCTTTAAACGGGGAATTTCCCAAGAC	1522
Qy	1495	CAGTGGATGAAAA-GTGGTGGGAGATGAAGCGAGAG-ATAGTGGGGTG-GTGGAACCT	1551
Db	1523	CAGTGGGTGAAAAAGTGGTGGGAGATGAAGCGAAAGATACTTGGGGTGCTGGGAACCT	1582
Qy	1552	GTGCCCCATGATGAACATA-CTGTGACCCCGCATCTCTGTTCATGTTTCTTAATGATTA	1610
Db	1583	GTGCCCCATGATGAACATACTGTGACCCCGCATCTCTGTTCATGTTTCTTAATGATTA	1642
Qy	1611	CTCATTCATTCGATATTACAAAGGACCCCT-TTACCAATTCAGTTTCAA--CAAGCACT	1667
Db	1643	CTCATTCATTCGATATTACAAAGGACCCCTGTATCCAAATTCAGTTTCAAAGGACACTT	1702
Qy	1668	TTGCAAGCAGCTAAACATGAAGGCCCTCTGCACAAAT--GTGACATCTCAAACTCTACA	1725
Db	1703	TTGCAAGCAGCTAAACATGAAGGCCCTCTGCACAAATTTGTGNCATTTCAATTTCTACA	1762
Qy	1726	GAAGCTGGACA---GAAACTGTTCAATATGCTGAGGCTTGGAAAA-TCAGAACCCCTGGA	1780

Db	1763	GAACGTCGTGGAGACAACACTGTTCAATATGCTGAGCGCTTGGAAAACTCAGAAACCCTCGGA	1824
Qy	1781	CCCTAGCATTTGGAAAATGTTGT - AGGAGCAAAGAACATGAATGTAAAGGCCA - CTGCTCAA	1838
Db	1823	CCC TAGCATTTGNAATGTTGTAAAGGACCAAGAACATGAATGTAAAGGCCACCTGCTCAA	1882
Qy	1839	CTACTTTGAGCCCTTATTATTACCTGGCTGAAAGACCAGAACAGAAATTCCTTTTGTTGGGATG	1898
Db	1883	CTACTTTGAGCCCTTATTATTACCTGGCTGAAAGACCAGAACAGAAATTCCTTTTGTTGGGATG	1942
Qy	1899	GAGTACCGACTGGAGTCCATATGCAGACCAACAGCATCA - AAGTGGAGATAAGCCTAAAT	1957
Db	1943	GAGTACCGACTGGAGTCCATATGCAGACCAACAGCATCA - AAGTGGAGATAAGCCTAAAT	2002
Qy	1958	CAGCTCTTGG - AGATAAAGCATATGAATGGAACGA - CAATGAAATGTACTGTTCGATC	2015
Db	2003	CAGCTCTTGGCAGATAAAGCATATGAATGGAACGACCATGAATGTACTGTTCGATC	2062
Qy	2016	AFTCTGTT - - - GCATATAGCTATCAGSCAGTACTTTTTTA - AAGTAAAAATCAGATGATT	2070
Db	2063	AFTCTGTTGGATATTGTTAATTGAGSCAGTACTTTTTTAACAAGTAAAAATCAGATGATT	2122
Qy	2071	CTTTTGGGAGGAGATGTCGGAGTGGCTAATTGGAACCAAGAAATCTCCCTTAATTTC	2130
Db	2123	CTTTTGGGAGGAGATGTCGGAGTGGCTAATTGGAACCAAGAAATCTCCCTTAATTTC	2182
Qy	2131	TTTGTCACTGCACCTAAAAATCTGTCT - CATATCATTTCTTAG - AACTGAAAGTTGAAAAGG	2188
Db	2183	TTTGTCACTGCACCTAAAAATGTGCTGATATCATTTCTAGNACTGAAGTTGAAAAGG	2242
Qy	2189	CCATCAGGATGTCGCGGAGCCCTA - TCAATGATGCTTTCCGCTCTGAATCACACGCCTA	2247
Db	2243	CCATCAGGATGTCGCGGAGCCCTACTCCATGATGCTTTCCGCTCTGAATCACACGCCTA	2302
Qy	2248	GAGTTTCTGGGATTCAGCACACACTTGGACCTCTTAACACGCCCTGTTTCCATATGG	2307
Db	2303	GAGTTTCTGGGATTCAGCACACACTTGGACCTCTTAACACGCCCTGTTTCCATATGG	2362
Qy	2308	CTGATTGTTTTGGAGTCTGTGATGGGAGTGATGGTTGG - CATGTGTCATCCT - GATCT	2365
Db	2363	CTGATTGTTTTGGAGTCTGTGATGGGAGTGATGAATGTTGGCCATGGTCATCTGATCT	2422
Qy	2366	TCACTGGGATCAGAGATCGGAAGAAAAATAAGACAGAAAGTGGAGA - AAATCCCTTA	2423
Db	2423	TCACTGGAAATCAGAGATCGGAAGAAAAATAAGACAGAAAGTGGAGAATATATCCTTTA	2482
Qy	2424	TGCCCTCATCGATNTAGCAAGGAG - AAAATAATCCAGGATTCACAAACACTGATGAT	2481
Db	2483	TGCCCTCATCGATNTAGCAAGGAGTATAAATAATCCAGGATTCGGAACACTGATGAT	2542
Qy	2482	GTTCAGACTCTCTTTAGAAAAATCTATGTTTTTCTCTTGGAGTGATTTTGGTGTATGT	2541
Db	2543	GTTCAGACTCTCTTTAGAAAAATCTATGTTTTTCTCTCTTTGAGGTGATTTGTTGTTATGT	2602
Qy	2542	AAATGTTAATTTTCATGGTATAGAAAAATATAAGATGATATAAGATATCATTTAAATGTCAAAA	2601
Db	2603	AAATGTTAATTTTCATGGTATAGAAAAATATAAGATGATATAAGATATCATTTAAATGTCAAAA	2662
Qy	2602	CTATGACTCTGTTCAGAAAAAAATGTTCTCAAGACAACATG - GCCAAGGAGAGACATC	2660
Db	2663	CTATGACTCTGTTCAGAAAAAAATGTTCTCAAGACAACAAAGTGCACAGGAGAGACATC	2722
Qy	2661	TTTCATTGACATGCTTTC - AGTATTTATTTCTGCTCTCGATTTTGACTTCTGTTCTGTTT	2719
Db	2723	TTTCATTGACATGCTTTC CAAAGTATTTATTTCTGCTCTCGATTTTGACTTCTGTTCTGTTT	2782
Qy	2720	CTTAATAAGGATTTTGTATTAGAGATATATTAGGAAAGTGTGTATTTGCTCTCACAGGCT	2779
Db	2783	CTTAATAAGGATTTTGTATTAGAGATATATTAGGAAAGTGTGTATTTGCTCTCACAGGCT	2842
Qy	2780	GTTTCAGGATTAATCTA - AATGTAAATGCTG - --TGAATTTCTGAAGTTGAAAA - CAAGG	2835
Db	2843	GTTTCAGGATTAATCTA - AATGTAAATGCTG - --TGAATTTCTGAAGTTGAAAA - CAAGG	2902

2836 ATATATCTTGGAGCA-AGTGTGGATCTTCATGGAATATGCGATCACTCTTAAGG 2894
|||||
2903 ATATATCATTTGGAGCATAGTGTGGATCTTGTATGGAATATGCGATCACTCTTAAGG 2962
|||||
2895 A-CAGTGGCTGGAACTGGTGTAGC-TGCAAGGATTGGAATGGCA-TGCATTAGCTCAC 2951
|||||
2963 ATCAGTGGCTGGAACTGGTGTAGCTTCAAGGATTGGAATGGCAATGCAATTAGCTCAC 3022
|||||
2952 TT---TCATTTAATCCATGTCACAGCA-TGACATGCTTT-CTTCACAGT-ACCTCAGTTC 3005
|||||
3023 TTGTCACTGGCATTCCATTTGGTCAAGGACTGACATCTTCCCTTCACAGTGAACCTCAGTTC 3082
|||||
3006 AAGTACTATGGTGAATTTGGCTACAGTGTATGTTGGAATCGA----TCATGCTTTCTTCAA 3061
|||||
3083 AAGTACTATGGTGAATTTGGCTACAGTGTATGTTGGAATCTGATCTATGCTTTCTTCAA 3142
|||||
3062 GGTGACAGGCTTAAGAGAGA---AGAATCCAGGGAACAGGTAGAGGACA-TGCTTTT 3117
|||||
3143 GGTGACAGGCTTAAGAGAGACAGCAATCCAGGCTACAGGTAGAGGACATTTGCTTTT 3202
|||||
3118 CACTTCCAGGTG---CTTCATCAACATCTCCCTG---ACACACAAACTAGAGCCAGG 3171
|||||
3203 CACTTCCAGGTGCTTGTATCAACATCTTCTGTACAAACACTGAAATCTAGAGCTCAG 3262
|||||
3172 GGCCT---CCGTGAATCCAGAGCATGCCCTGATAGAAA----CTCATTTCTACTGTT 3222
|||||
3263 GGGCTCTCGGGAATCTCCAGAGACATGCCCTGATAGAAATCTTATTTCTAGCTGTT 3322
|||||
3223 CTCTAAGTGTGAGTGAAT---GGAAATCCAACTGTATGTTTCACCCCTCTGAAGTGGGTA 3279
|||||
3223 CTCTAAGTGTGAGTGAAT---GGAAATCCAACTGTATGTTTCACCCCTCTGAAGTGGGTA 3382
|||||
3280 CCCAGTCTCTTAAATCTTTTGTATTTGCTTCACAGTGTGTTGACAGTGTGACACAAAGC 3339
|||||
3383 CCCAGTCTCTTAAATCTTTTGTATTTGCTTCACAGTGTGTTGACAGTGTGACCCCAAGC 3442
|||||
3340 AGACACTCAATTAATGCTAGATTTACACACTC 3371
|||||
3443 AGACACTCAATTAATGCTAGATTTACCCCTC 3474
|||||

RESULT 9

AAZ59466

ID AAZ59466 standard; DNA; 2262 BP.

XX

AC AAZ59466;

XX

DT 11-APR-2000 (first entry)

XX

DE Human MPROT15 coding sequence #2.

XX

KW MPROT15; treatment; hypertension; human; myocardial disease; apoplexy;

KW heart disease; apoplexy; heart disease; nervous denaturation; ds;

KW Alzheimer's disease; hormone; cytokine.

XX

OS Homo sapiens.

XX

PN JP11318472-A.

XX

PD 24-NOV-1999.

XX

PF 22-JAN-1999; 99JP-0014949.

XX

PR 13-MAY-1998; 98GB-0010373.

XX

PR 18-AUG-1998; 98GB-0018009.

XX

XX (SMIK) SMITHKLINE BEECHAM PLC.

PA

XX WPI; 2000-109268/10.

XX

XX MPROT15 polypeptide and MPROT15 polynucleotides - useful for the

PT treatment of hypertension, myocardial diseases, apoplexy, heart

PT diseases, nervous denaturation, Alzheimer's disease etc.

XX

PS Claim 18; Page 15; 22pp; Japanese.

XX

CC This is coding sequence #2 of human MPROT15. The MPROT15 polynucleotide
and polypeptide sequences can be used for the treatment of hypertension,
myocardial diseases, apoplexy, heart diseases, nervous denaturation,
Alzheimer's disease and diseases related to the processing of peptide
hormones and cytokines.

XX

SQ Sequence 2262 BP; 693 A; 450 C; 523 G; 596 T; 0 other;

Query Match

56.6%; Score 1922.2; DB 21; Length 2262;

Best Local Similarity 90.5%; Pred. No. 0;

Matches 2164; Conservative 0; Mismatches 38; Indels 189; Gaps 3;

QY 109 AGCCTTGTGCTGTAACCTGCTCAGTCCACCATTTGAGAACAGCCCAAGACATTTTG 168

Db 61 ATCCTTGTGCTGTAACCTGCTCAGTCCACCATTTGAGAACAGCCCAAGACATTTTG 120

QY 169 GACAAGTTTAAACACCAAGCCGAAGACCTGTTCTATCAAGTTCACTTGTCTTGGAAAT 228

Db 121 GACAAGTTTAAACACCAAGCCGAAGACCTGTTCTATCAAGTTCACTTGTCTTGGAAAT 180

QY 229 TATAACACCAATATTTACTGAAGAGAATGTCACAAACATGAATATGCTGGGACAAATGG 288

Db 181 TATAACACCAATATTTACTGAAGAGAATGTCACAAACATGAATATGCTGGGACAAATGG 240

QY 289 TCTGCGCTTTTAAAGAACAGTCCACACTTGCCCAATGTATCCACTACAGAAATTCAG 348

Db 241 TCTGCGCTTTTAAAGAACAGTCCACACTTGCCCAATGTATCCACTACAGAAATTCAG 300

QY 349 AATCTCACAGTCAAGCTTCAGCTGCAGGCTTTCAGCAAAATGGTCTTCAGTGTCTCA 408

Db 301 AATCTCACAGTCAAGCTTCAGCTGCAGGCTTTCAGCAAAATGGTCTTCAGTGTCTCA 360

QY 409 GAAGCAAGAGCAAAACGGTTGAACAAATTTCTAAATACAAATGAGACCAATCTACAGTACT 468

Db 361 GAAGCAAGAGCAAAACGGTTGAACAAATTTCTAAATACAAATGAGACCAATCTACAGTACT 420

QY 469 GGAAGAGTTTGAACCCAGATATCCACAGAAATGCTTATTACTTGAACCCAGTGTGAAT 528

Db 421 GGAAGAGTTTGAACCCAGATATCCACAGAAATGCTTATTACTTGAACCCAGTGTGAAT 480

QY 529 GAAATATGCAAAACAGTTTAGACTACAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGA 588

Db 481 GAAATATGCAAAACAGTTTAGACTACAATGAGAGGCTCTGGGCTTGGGAAAGCTGGAGA 540

QY 589 TCTGAGTCTGGCAAGCAGCTGAGGCAATTTATGAGAGATGATGCTGCTTTGAAATGAG 648

Db 541 TCTGAGTCTGGCAAGCAGCTGAGGCAATTTATGAGAGATGATGCTGCTTTGAAATGAG 600

QY 649 ATGCGCAAGCAAAATCATTTATGAGGACTATGGGATTTATGAGAGAGACTATGAAGTA 708

Db 601 ATGCGCAAGCAAAATCATTTATGAGGACTATGGGATTTATGAGAGAGACTATGAAGTA 660

QY 709 AATGGGTAGATGGCTATGACTACAGCCGCGGCTGATGATTTGAAGATGTTGGAACATACC 768

Db 661 AATGGGTAGATGGCTATGACTACAGCCGCGGCTGATGATTTGAAGATGTTGGAACATACC 720

QY 769 TTTGAAGAGATTAAACCAATTTATGAGCAATCTTTCATGCTTATGAGGCGCAAGTTGATG 828

Db 721 TTTGAAGAGATTAAACCAATTTATGAGCAATCTTTCATGCTTATGAGGCGCAAGTTGATG 780

QY 829 AATGCTATCTTCTCTATATTCAGTCCAAATTTGATGCTCCCTGCTCATTTTGTGGTAT 888

Db 781 AATGCTATCTTCTCTATATTCAGTCCAAATTTGATGCTCCCTGCTCATTTTGTGGTAT 840

QY 889 ATGTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTTGACAGAAACCA 948

Db 841 ATGTGGGTAGATTTTGGACAAATCTGTACTCTTTGACAGTTCCTTTTGACAGAAACCA 900

QY 949 AACATAGATGTTACTGATGCAATGTTGGACAGCCCTGGGATGCACAGAGAAATTTCAAG 1008

Db	1813	GTGAAGATG-----TTTGTGTTTGTCTCTACAGGGAGGAGAT	1851
Qy	2089	GTGCGAGTGGCTAATTTGAAACCAAGAATCTCCTTTAAATTTCTTGTCACTGCACCTAAA	2148
Db	1852	GTGCGAGTGGCTAATTTGAAACCAAGNAICTCCTTTAAATTTCTTGTCACTGCACCTAAA	1911
Qy	2149	AATGTGTCTGATATCATTCCTAGAACCTGAAGTTGAAAGGCCATCAGGATGTCCTCCGGAGC	2208
Db	1912	AATGTGTCTGATATCATTCCTAGAACCTGAAGTTGAAAGGCCATCAGGATGTCCTCCGGAGC	1971
Qy	2209	CGTATCAATGATGCTTTCCGCTCTGAATGACACACAGCCTAGAGTTTCTGGGATACAGCCA	2268
Db	1972	CGTATCAATGATGCTTTCCGCTCTGAATGACACACAGCCTAGAGTTTCTGGGATACAGCCA	2031
Qy	2269	ACACTTGGACCTCTAACACAGCCCTGTTTCCATATGCGTGAATCTTTTGGAGTTGTG	2328
Db	2032	ACACTTGGACCTCTAACACAGCCCTGTTTCCATATGCGTGAATCTTTTGGAGTTGTG	2091
Qy	2329	ATGSGAGTGTAGTGGTGGCATTTGTCACTCTCATCTTCACTGGGATCAGAGATCGGAAG	2388
Db	2092	ATGSGAGTGTAGTGGTGGCATTTGTCACTCTCATCTTCACTGGGATCAGAGATCGGAAG	2151
Qy	2389	AAGAAAAATTAACACAGCAAGTGGAGAAAATCCTTTATGCCCTCCATCCATATTAGCAAGGA	2448
Db	2152	AAGAAAAATTAACACAGCAAGTGGAGAAAATCCTTTATGCCCTCCATCCATATTAGCAAGGA	2211
Qy	2449	GAAAAATAATCCAGATTCCAAAAACACTGATGATGTTTGCAGACCTCCCTTTTAG	2499
Db	2212	GAAAAATAATCCAGATTCCAAAAACACTGATGATGTTTGCAGACCTCCCTTTTAG	2262
RESULT	10		
AC	AAC84368		
ID	AAC84368	standard; cDNA; 2638 BP.	
XX	AAC84368;		
DT	19-MAR-2001	(first entry)	
XX	Mouse	Zace2-5 protein encoding cDNA.	
XX	Zace2;	metalloenzyme; angiotensin-converting enzyme; ACE; fertility;	
KW	zinc metalloproteinase;	blood pressure; zinc protease; hypertension;	
KW	ventricular systolic dysfunction;	renal impairment; heart failure;	
KW	scleroderma renal crisis;	atherosclerosis; antinflammatory; mouse;	
KW	antiarthritic;	bradykinin inactivator; ss.	
OS	Mus sp.		
XX	Key	Location/Qualifiers	
FT	CDS	106..2523	
FT		/*tag- a	
FT		/product- "Zace2-5"	
FT		/note- "The coding fragment is specifically claimed for"	
XX	PN	WO200070032-A1.	
XX	PD	23-NOV-2000.	
XX	PF	03-MAY-2000; 2000WO-US11932.	
XX	PR	13-MAY-1999; 99US-0311482.	
XX	PR	27-AUG-1999; 99US-0384706.	
XX	PA	(Zymo) ZymoGenetics Inc.	
XX	PI	Piddington CS, Petrie CR, Shoemaker KE, Bishop PD;	
XX	WP	WPI: 2001-025018/03.	
DR	P-PSDB;	AAB48097.	
XX	PT	Angiotensin-converting enzyme, Zace2, useful for treating inflammatory	
PT	bowel disease, e.g. Crohn's disease and ulcerative colitis, or diseases		

PT associated with inflammation such as arthritis and enterocolitis -
XX
PS Claim 10; Page 104-109; 125pp; English.

The invention relates to the metalloenzyme Zace2. Zace2, an angiotensin-converting enzyme is a zinc metallopeptidase that plays roles in blood pressure regulation and fertility. Zace2 can be expressed by standard recombinant methodology. Zace2 polypeptides are useful for treating an inflammatory bowel disease (e.g. Crohn's disease and ulcerative colitis), diseases associated with inflammation like arthritis and enterocolitis, as targets for identifying modulators of zinc protease activity, for screening or identifying new angiotensin-converting enzyme (ACE) inhibitors, and as a basis for rational drug design for inhibitory molecules. The nucleic acids can be used to detect the expression of a Zace2 gene in a biological sample, as probes for *in vivo* diagnosis and for detecting and localizing Zace2 gene expression in tissue samples, to determine whether a subject's chromosomes contain a mutation in the Zace2 gene, and to detect aberrations associated with the Zace2 locus. Inhibitors of ACE are used for treating hypertension of various conditions, including left ventricular systolic dysfunction, progressive renal impairment, scleroderma renal crisis, congestive heart failure due to dysfunction, and treatment of atherosclerosis. Zace2 agonists may be used to treat infertility while Zace2 antagonists are used for inducing infertility. The present sequence represents a cDNA encoding the mouse Zace2-5 protein.

Sequence 2638 BP; 802 A; 556 C; 611 G; 669 T; 0 other;

Query Match 55.6%; Score 1888.6; DB 22; Length 2638;
Best Local Similarity 84.1%; Pred. No. 0;
Matches 2161; Conservative 0; Mismatches 394; Indels 16;

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Db	75	CAGTGGATGGGATCTTGGCGCACGGGGAAGATGTCCAGCTCCTCGGCTCTCTCTCAG	134
QY	111	CCTTGTCTGTAACTGCTGCTCAGTCCACCATTTAGGAACAGGCCAAGACATTTTTCGA	170
Db	135	CCTTGTCTGTACTACTGCTCAGTCCCTCACCGAGGAANAATGCCAAGACATTTTANA	194
QY	171	CAAGTTTAAACCAAGCGGAAGACCTGTTCTATCAAAAGTTCACCTGCTTCTTTCGGAATTA	230
Db	195	CAACTTTAATCAGGAAGCTGAAGACCTGCTTATCAAAAGTTCACCTGCTTCTTGGAAATTA	254
QY	231	TAAACACCAATATTACTGAGAGAGNATCTCCAAAACATGAATAATGCTGGGGACAAATGGTC	290
Db	255	TAATACTAACATTTACTGAAGAAATCCCCAAAAGATGAGTGAGGCTGCAGCCCAATGGTC	314
QY	291	TGCTCTTTTAAAGGAACAGCTCCACACCTTGCCCAAATGTATCCACTACAAGAAATTCAGAA	350
Db	315	TGCTTTTATGAAGAACAGCTTAAGACTGCCCAAAGTTTCTCCTACTACAAGAAATCCAGAC	374
QY	351	TCTCACAGCTCAAGCTTTACGCTGGAGGCTCTTACAGCAAAATGGGTCTTTCAGTGTGTGAGA	410
Db	375	TCCGATCATCAAGCGCTCAACTACAGGCGCTTCAGCAAAAGTGGGTCTTCAGCACTCTCAGC	434
QY	411	AGACAAGAGCAACCGTGTGAACACAAATCTTAATACAACTCAGCACCAATCTACGTACTGCG	470
Db	435	AGACAAGAACCAACAGTGTGAACACAAATCTTGAACACCATCAGCACCAATTTACAGTACTGG	494
QY	471	AAAAGTTGTAAACCCAGATAATCCACAAGAAATGCTTATTACTTGAACACAGGTTTGAATGA	530
Db	495	AAAAGTTTGCACCCCAAGAACCCACAGNAATGCTTATTACTTGAGCCAGGATTTGGATGA	554
QY	531	AATAAATGCAACAGTTTATAGACTACAAATGAGAGGCTCTTGGCTTGGGAAAGCTGGAGATC	590
Db	555	AATAAATGCGGAACAGACAGACTACAACCTTAGGCTCTGGGCATGGGAGGCTGGAGGCG	614
QY	591	TGAGTCCGCRAGCAGCTCAGGCCATTATATGAAGAGTATGTGGCTTGGGAAATGAGAT	650
Db	615	TGAGTTTGGCAAGCAGCTCAGGCCGTTGTATGAAGAGTATGTGGTACTTGAAGAACGAGAT	674
QY	651	GGCAAGAGCAAAATCAATTATGAGCACTATGGGATTAATGGAGAGGAGACTATGAAGTAA	710

Db	255	TAATACTAACATTTACTGAAGAAAAATGCCCAAAAGATGAGTGAAGGCTGCAGCCAAATGGTC	314
Qy	291	TGCGCTTTTAAAGGAACAGCTCCACACTTTGCCCAAAATGTATCCACTACAAAGAAATTCAGAA	350
Db	315	TT	
Qy	351	TCTCACAGTCAAGCTTTACGTGCGAGGCTCTTTCAGCAAAAATGGGTCTTCASTGCTGTCAGA	410
Db	375	TTCCGATCATCAAGCGTCAACTACAGGCGCTTCAGCAAAAGTGGTCTTCAGCACTCTCTCAGC	434
Qy	411	AGACAAGAGCAAAACGGTTTGAACACAAATTTCTAATAATACATGACCAACCATCTACAGTACTGG	470
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Qy	471	AAAACTTTTAAACCCAGATAATPCCACAAGAATGCTATTACTTTGAACACAGGTTTGAATGA	530
Db	495	AAAGTTTGCRAACCAAGGAACCCACAGAATGCTTTATTCTTGAACCAAGGATTGGATGA	554
Qy	531	AATAATGGCAACAGCTTTTAGACTACAATAGAGAGGCTCTGGGCTTGGGAAAAGTTGGAGATC	590
Db	555	AATAATGGCGACAAGCACAGACTACAACCTTAGGCTCTGGGCATGGGAGGCTGGAGGGC	614
Qy	591	TGAGTCTGGCAAGCAGCTTGAGGCCAATTTATCAAGAGTATGTGGCTTGGAAAAATCAGAT	650
Db	615	TGAGTCTGGCAAGCAGCTTGAGGCCGCTGTATGAAGAGTATGTGGTCTTGAANAACAGAT	674
Qy	651	GGCAAGACAATCATTTATGAGGACTATGGGGATTTATGGAGAGAGACTATTGAAGTAA	710
Db	675	GGCAAGACAACAAATTTATACGACTATGGGATTTATGGCAGGGGACTATGAAACGAGA	734
Qy	711	TGGGCTAGATGGCTATGACTACAGCCGGCGCAGTTGATTGAAGATGTGGAACATACCTT	770
Db	735	GGGAGCAGATGGCTACAACATATACCGTTAACCCAGTTGATTGAAGATGTGAACGTAACCTT	794
Qy	771	TGAAGAGATTTAAACCATTTATATGAACATCTTCATGCCTATGTGAGGGCAAAAGTTGATGA	830
Db	795	CGCAGAGATCAAGCCATTTGATGAGCATCTTCATGCCTATGTGAGGAGGAAGTTGATGA	854
Qy	831	TGCCTATCTCTCTATATCAGTCCCAATTTGGATGGCTCCCTGCTCATTTCTGTTGGTGCATAT	890
Db	855	TACCTACCTTCTCATCATCAGCCCACTGGATGCCTCCCTGCCCATTTCTCTTGGTGCATAT	914
Qy	891	GTGGGCTAGATTTTGGCAAAATCTCTACTCTTTTGACAGTTCCTCTTTGGACAGAAACCAA	950
Db	915	GTGGGCTAGATTTTGGCAAAATCTCTACCTTTTGACTGTTCCCTTTGGCAGCAAAACCAA	974
Qy	951	CATAGATGTTACTGATGCAAGGTTGGACAGGCTGGGATGCACAGAGAAATATTCAAGGA	1010
Db	975	CATAGATGTTACTGATGCAAGTATGAATCAGGGCTGGGATGCAGAAAGGATATTCAAGA	1034
Qy	1011	GGCCGAGAAAGTTCTTTGTATCTGTTGGTCTTCCCTAATATGACTCAAGGAATCTCTGGCAAA	1070
Db	1035	GGCAGAGAAATTTCTTTGTTCTTGTTGGCCTTCCCTCAATATGACTCAAGGAATCTCTGGCAAA	1094
Qy	1071	TTCCATGTCTAACGGACCCAGGAAATTTTCAGAAAGCAGTCTGCCATPCCACAGACTTTGGGA	1130
Db	1095	CTCTATGCTGACTGAGCCAGCAGATGGCCGGAAAGTTGCTGCCACCCACAGCTTTGGGA	1154
Qy	1131	CCTGGGGAAGGGCGACTTCAGGATCCTTATGTGCAAAAGGTGCACATGGCAGACTTCCCT	1190
Db	1155	TCTGGGACACGGAGACTTCAGAAATCAAGATGTGTACAAAGGTGCACAAATGGCAAACTCTT	1214
Qy	1191	GACAGCTCATGATGAGATGGGCGCATATCCAGTATGATATGGCATATGTGCAACAGCTTCT	1250
Db	1215	GACAGCCCATCNCAGATGGGHACATCCAAATATGACATGGGATATGGCAGGCAACCTTT	1274
Qy	1251	TCTGTAAGAAATGGAGCTTAATGAAGGATTTCCATGAAGCTGTGTGGGCAATCATGTCACT	1310
Db	1275	CCTGCTAAGAAACGGAGCCATGAAGGGTTCCATGAGCTGTGGAGAAATCATGTCACT	1334
Qy	1311	TTCTGCAGCCACACCTTAAGCAATTTAAATPCCATTTGCTCTGTCAACCCGATTTTCAAGA	1370
Db	1335	TTCTGCAGCTACCCCAAGCACTCTGAAATPCCATTTGGTCTTCTGTGCCATTCGCAATTTCAAGA	1394

QY	1371	AGACAAATGAAACAGAAATAAACCTTCTCTGCTCAACAAAGCACACACGATTTGTTGGGACTCT	1433
DB	1395	AGATAGCGAAACAGAGATAAACCTTCCCTACTGAAACAGGCATTCACAAATTTGTTGGACACT	1454
QY	1431	GCATTTTACTTACATCTTAGAGAAGTGGAGGTGGATGGTCTTTAAAGGGGAAATTTCCCAA	1490
DB	1455	ACCGTTTACTTACATGTTTAGAGAAGTGGAGGTGGATGGTCTTTGGGGTGAAATTTCCCAA	1514
QY	1491	AGACAGTGGATCAAAAAGTGGTGGAGAGTAGAACGGAGAGATAGTTGGGGTGGTGGAAACC	1550
DB	1515	AGAGCAGTGGATGAAAAAGTGGTGGGAGATGAAGCGGGAGATCGTTGGTGTGGTGAGGC	1574
QY	1551	TGTGCCCCATGATGAACAATACTGTGACCCCGCATCTCTGTTCCATGTTTCTTAATGATTA	1610
DB	1575	TCTGCTCTGTGATGAACAATACTGTGACCTGCATCTCTCTTCATGTTTCTTAATGATTA	1634
QY	1611	CTCATTTCTGATTTACACAGGAGCCCTTTACCAATTCACGTTTCAAGAAGCACATTG	1670
DB	1635	CTCATTTCTGATATTACAAAGGACCATTATACCAATTCAGATTTCAAGAGCTCTTTG	1694
QY	1671	TCAGCAGCTAAACATGAAGGCCCTCTGCACAAATGTGACATCTCAAACTCTACAGAAGC	1730
DB	1695	TCAGCAGCTAGTATATATGTTGTTCTTCACAAATGTGACATCTCAAACTCTACAGC	1754
QY	1731	TGGACAGAAACTGTTTCAATATGCTGAGGCTTGGAAAAATCAAGACCTGTGACCCTAGCAT	1790
DB	1755	TGGCAGAAAGTTGCTCAAGATGCTAGTCTTTGCAATTCAGAGCCCTGGACCCGAAAGCCT	1814
QY	1791	GGAAAAATGTTTAGGCGAAGAACATGAATGTAAAGCCACTGCTCAACTACTTTTGAGCC	1850
DB	1815	GGAAAAATGTTTAGGAGCAAGGAATATGATGTAAACCCACTGCTCAATTTACTTTCCAACC	1874
QY	1851	CTTATTTTACCTGCGCTGAAGACCAGAACAGAAATCTCTTTGCGGATGGAGTACCGACTG	1910
DB	1875	GTGTGTTTGACTGGCTGAAGAGCAGAACAGAAATCTTTTGGGGTGGAACTGANTG	1934
QY	1911	GAGTCCATATGCAGACCAAGACTCAAAAGTAGAGATGAAGCTTAAATTCAGCTCTTTGGAGA	1970
DB	1935	GAGCCATATGCCGACCAAGCANTTAAAGTAGAGATAAGCCTAAATCAGCTCTTTGGAGC	1994
QY	1971	TAAAGCATATGAATGAAGCAGCAATGAATGTACCTGTTCCGATCATCTGTTGCATATGC	2030
DB	1995	TAAATGCATATGAATGACCAACCAACCAAAATGTTCTCTTCCGATCATCTGTTGCATATGC	2054
QY	2031	TATGAGCGAGTACTTTTAAAAGTAAAAATCAGATGATCTTTTGGGGAGGAGGATGT	2090
DB	2055	CATGAAGAATATCTTCAATATCAAAAACAGACAGTTCTCTTTCTAGAGGAAGATGT	2114
QY	2091	GGAGTGGCTAATTTGAAACCAAGAAATCTCTTTAATTTCTTTGTCACTGCACCTTAAAA	2150
DB	2115	ACGAGTGAATTTGAAACCAAGAGTCTCTTCTACTTTCTTTGTCACTTCACCTCAACCAAA	2174
QY	2151	TGTGTCTGATATCATCTCTAGAACTGAAGTTGAAAAGGCCATCAGGATGTCCTGGAGCCG	2210
DB	2175	TGTGTCTGATGTCATCTCTAGAACTGAAGTTGAAGTGCCATCAGGATGTCCTGGGGCCG	2234
QY	2211	TATCAATGATGCTTTCCCTGCTGAATCAGAACACCCCTAGAGTTTCTGGGGATACAGCCAAC	2270
DB	2235	CATCAATGATGCTTTTGGCTGAATGATACACCCCTGGAGTTTCTGGGGATTCACCCAAC	2294
QY	2271	ACTTGGACCTCTTAACACGCCCTGCTTTCCATATGCTCATGTTTCTGGAGTTGTGAT	2330
DB	2295	ACTTGAGCCACCTTACCAGCCTCTGTACCATATGCTCATTTTCTGGTGTGTGAT	2354
QY	2331	GGAGTGAATGAGTTGGATTTGTCATCTCTGATCTTCACTGGGATCAGAGATCGGAAGAA	2390
DB	2355	GGCACTGGTGTGTTGGCATCATCATCTCTGATTTGCTGGATCAAGGTCGAAAGAA	2414
QY	2391	GAATAATAAGCAAGAAGTGGAGAAATCTTATGCTTCATCGATATTAGCAAGGAGA	2450
DB	2415	GAATAAGAACAAAAGAGAGAGAGACCTTATGATCTCATGACATTTGAAAAAGAGA	2474

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PR 20-OCT-2000; 2000US-0241809.
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PR 01-NOV-2000; 2000US-0244617.
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PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
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PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX PA (HUMA-) HUMAN GENOME SCI INC.
XX PI Rosen CA, Barash SC, Ruben SM;
XX WPI: 2001-465570/50.
XX
PT Isolated nucleic acid molecule encoding a reproductive system antigen -
PT is used in preventing, treating or ameliorating a medical condition -
XX Disclosure; SEQ ID NO 8705; 1297pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention.
XX
SQ Sequence 946 BP; 299 A; 197 C; 165 G; 285 T; 0 other;
XX

Query Match 27.9%; Score 946; DB 22; Length 946;

Best Local Similarity 100.0%; Pred. No. 8e-246;
Matches 946; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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QY 2666 TGACATTCCTTTTCACTATTTATTTCTCTCTCTGGATTTGACTTCTCTGTTCTTCTTAAT 2725
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QY 2966 TTGTCAAGGATGACATGCTTCTTCAAGTAACTCAAGTAACTCAAGTAACTCAAGTAACTCA 3025
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DB 106 CTCTGAAGTGGGTACCCAGTCTCTTAAATCTTTTGTATTTGCTCAAGTGTGTTGACAGT 47
QY 3326 GCTGAGCAAAAGCAGACACTCAATAAATGCTAGATTTACACTC 3371
DB 46 GCTGAGCAAAAGCAGACACTCAATAAATGCTAGATTTACACTC 1

RESULT 15
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ID AAL06018 standard; DNA; 946 BP.
XX
AC AAL06018;

XX 21-NOV-2001 (first entry)
 XX Human reproductive system related antigen DNA SEQ ID NO: 8706.
 DE Human; reproductive system related antigen; reproductive system disorder;
 KW cancer; gene therapy; ds.
 KW Homo sapiens.
 XX WO200155320-A2.
 XX 02-AUG-2001.
 XX 17-JAN-2001; 2001WO-US01339.
 XX 31-JAN-2000; 2000US-0179065.
 PR 04-FEB-2000; 2000US-0180628.
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 PR 17-NOV-2000; 2000US-0249218.
 PR 17-NOV-2000; 2000US-0249244.
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PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX (HUMA-) HUMAN GENOME SCI INC.
XX
XX Rosen CA, Barash SC, Ruben SM;
XX WPI; 2001-465570/50.
DR
XX
XX Isolated nucleic acid molecule encoding a reproductive system antigen -
PT is used in preventing, treating or ameliorating a medical condition -
XX
XX Disclosure; SEQ ID NO 8706; 1297pp + Sequence Listing; English.
PS
XX The present invention provides the protein and coding sequences of a
CC number of human reproductive system related antigens. These can be used
CC in the prevention and treatment of reproductive system disorders,
CC including cancer. The present sequence is a genomic sequence encoding a
CC protein of the invention.
XX
XX Sequence 946 BP; 299 A; 197 C; 165 G; 285 T; 0 other;
SQ
Query Match 27.9%; Score 946; DB 22; Length 946;
Best Local Similarity 100.0%; Pred. No. 8e-246;
Matches 946; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 2426 CTTCCATCGATATTAGCAAGGAGAAATATATCCAGGATCCAAACACACTGATGATGTTTC 2485
DB 946 CTTCCATCGATATTAGCAAGGAGAAATATATCCAGGATCCAAACACACTGATGATGTTTC 887
QY 2486 AGACCTCCTTTTACAAAATCTATGTTTTCTCTTGAGGTGATTTTGTGTATGTAAT 2545
DB 886 AGACCTCCTTTTACAAAATCTATGTTTTCTCTTGAGGTGATTTTGTGTATGTAAT 827
QY 2546 GTTAATTTTCATGGTATAGAAAATATAGATGATAAGATATCATTAATTAATGTCAAAACAT 2605
DB 826 GTTAATTTTCATGGTATAGAAAATATAGATGATAAGATATCATTAATTAATGTCAAAACAT 767
QY 2606 GACTCTGTTTCAGAAAAAATGTCCTCAAGACAATGCGCAAGGAGAGAGATCTTCAT 2665
DB 766 GACTCTGTTTCAGAAAAAATGTCCTCAAGACAATGCGCAAGGAGAGAGATCTTCAT 707
QY 2666 TGACATTCCTTCAGTATTTATTTCTGTCCTGGAATTCGATTCCTGTTCTGTTTCTTAAT 2725
DB 706 TGACATTCCTTCAGTATTTATTTCTGTCCTGGAATTCGATTCCTGTTCTGTTTCTTAAT 647
QY 2726 AAGGATTTTGTATAGATATATTAGGAAAGTGTGATTTGCTCTCACAGGCTGTTTCAG 2785
DB 646 AAGGATTTTGTATAGATATATTAGGAAAGTGTGATTTGCTCTCACAGGCTGTTTCAG 587
QY 2786 GGATAATCTAATGTAATGCTGTTGTAATTTCTGAAGTTGAAAACAAGGATATATCAT 2845
DB 586 GGATAATCTAATGTAATGCTGTTGTAATTTCTGAAGTTGAAAACAAGGATATATCAT 527
QY 2846 GGAGCAAGTGTGGATCTTTGTATGGAATATGGAATGATCCTTGTAGGACAGTGCCTGG 2905
DB 526 GGAGCAAGTGTGGATCTTTGTATGGAATATGGAATGATCCTTGTAGGACAGTGCCTGG 467
QY 2906 GAACCTGGTGTAGTCCAGGATAGAAATGGCATGCAATAGCTACCTTTCATTTTAATCCA 2965
DB 466 GAACCTGGTGTAGTCCAGGATAGAAATGGCATGCAATAGCTACCTTTCATTTTAATCCA 407
QY 2966 TTGTCAAGGATGACATGCTTTCTTTCACAGTAACCTCAAGTACTATGTTGATTTGCC 3025
DB 406 TTGTCAAGGATGACATGCTTTCTTTCACAGTAACCTCAAGTACTATGTTGATTTGCC 347
QY 3026 TACAGTGTATTTGGAATGATCATGCTTTCTTTCAGGTTGACAGGCTTAAGAGAGAAGA 3085
DB 346 TACAGTGTATTTGGAATGATCATGCTTTCTTTCAGGTTGACAGGCTTAAGAGAGAAGA 287

QY 3086 ATCCAGGGAACAGGTAGAGACATTTGCTTTTTTCACTTCCAAAGGTGCTTGATCAACATCTC 3145
DB 286 ATCCAGGGAACAGGTAGAGACATTTGCTTTTTTCACTTCCAAAGGTGCTTGATCAACATCTC 227
QY 3146 CCTGACAAACAAACTAGAGCCAGGGGCTCCGGTGAACCTCCAGAGCATGCCCTGATAGA 3205
DB 226 CCTGACAAACAAACTAGAGCCAGGGGCTCCGGTGAACCTCCAGAGCATGCCCTGATAGA 167
QY 3206 AACTCATTTTCTACTGTTCTCTTAACCTGTGAGTGAATGGAAATTCCTCACTGTATGTTCAAC 3265
DB 166 AACTCATTTTCTACTGTTCTCTTAACCTGTGAGTGAATGGAAATTCCTCACTGTATGTTCAAC 107
QY 3266 CTCTGAAGTGGGTACCCAGTCTCTTAAATCTTTTGTATTTGCTCACAGTGTGTTGAGCAGT 3325
DB 106 CTCTGAAGTGGGTACCCAGTCTCTTAAATCTTTTGTATTTGCTCACAGTGTGTTGAGCAGT 47
QY 3326 GCTGAGCAACAAGCAGACACTCAATAAATGCTAGATTTACACACTC 3371
DB 46 GCTGAGCAACAAGCAGACACTCAATAAATGCTAGATTTACACACTC 1

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